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<210> 5831

<211> 2216

<212> DNA

<213> Homo sapiens

<400> 5831

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<210> 5832

<211> 322

<212> PRT

<213> Homo sapiens

<400> 5832

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Phe	Asn	Leu	Pro	Ser	Ser	His	Leu	Arg	Pro	Ile	Thr	Asp	Ser	Pro	Val
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Leu	Gly	Ala	Gln	Arg	Pro	Arg	Asn	Ala	Gln	Leu	Asp	Cys	Ser	Lys	Leu
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<210> 5833
 <211> 805
 <212> DNA
 <213> Homo sapiens

<400> 5833
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<210> 5834
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 35 40 45
 Asn Asn Gln Glu Ser Phe Ile Ala Phe Ala Arg Val Phe Ser Gly Val
 50 55 60
 Ala Arg Arg Gly Lys Lys Ile Phe Val Leu Gly Pro Lys Tyr Ser Pro
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85 90 95
 Gly Leu Pro Gln Val Pro His Met Ala Tyr Cys Ala Leu Glu Asn Leu
 100 105 110
 Tyr Leu Leu Met Gly Arg Glu Leu Glu Tyr Leu Glu Glu Val Pro Pro
 115 120 125
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 130 135 140
 Ala Thr Leu Cys Ser Leu Pro Ser Cys Pro Pro Phe Ile Pro Leu Asn
 145 150 155 160
 Phe Glu Ala Thr Pro Ile Val Arg Val Ala Val Glu Pro Lys His Pro
 165 170 175
 Ser Glu Met Pro Gln Leu Val Lys Gly Met Lys Leu Leu Asn Gln Ala
 180 185 190
 Asp Pro Cys Val Gln Ile Leu Ile Gln Glu Thr Gly Glu His Val Leu
 195 200 205
 Val Thr Ala Gly Glu Val His Leu Gln Arg Cys Leu Asp Asp Leu Lys
 210 215 220
 Glu Arg Phe Ala Lys Ile His Ile Ser Val Ser Glu Pro Ile Ile Pro
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<210> 5835

<211> 420

<212> DNA

<213> Homo sapiens

<400> 5835

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<210> 5836

<211> 140

<212> PRT

<213> Homo sapiens

<400> 5836

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Tyr	Glu	Glu	Lys	Leu	Lys	Leu	Val	Ala	Leu	His	Lys	Gln	Val	Leu	Met									
										35					40					45				
Gly	Pro	Tyr	Asn	Pro	Asp	Thr	Cys	Pro	Glu	Val	Gly	Phe	Phe	Asp	Val									
										50					55					60				
Leu	Gly	Asn	Asp	Arg	Arg	Arg	Glu	Trp	Ala	Ala	Leu	Gly	Asn	Met	Ser									
										65					70					75				
Lys	Glu	Asp	Ala	Met	Val	Glu	Phe	Val	Lys	Leu	Leu	Asn	Arg	Cys	Cys									
										85					90					95				
His	Leu	Phe	Ser	Thr	Tyr	Val	Ala	Ser	His	Lys	Ile	Glu	Lys	Glu	Glu									
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Gln	Asp	Lys	Lys	Arg	Lys	Glu	Glu	Glu	Glu	Arg	Arg	Arg	Arg	Glu	Glu									
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<211> 582

<212> DNA

<213> Homo sapiens

<400> 5837

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<210> 5838

<211> 88

<212> PRT

<213> Homo sapiens

<400> 5838

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Leu Ala Gln Lys Thr Asn Lys Ala Trp Ala Lys Gly Asp Ile Gln Gly

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<210> 5839

<211> 1895

<212> DNA

<213> Homo sapiens

<400> 5839

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<210> 5840

<211> 138

<212> PRT

<213> Homo sapiens

<400> 5840

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			20					25					30		
Leu	Met	Val	His	Gly	Trp	Cys	Pro	Val	Ile	Phe	Ser	Trp	Ala	Val	Ala
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Pro	Arg	Gly	Ser	Gly	Phe	Pro	Ala	Gln	Gly	Ile	Phe	Asp	Pro	Cys	Gln
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Arg	Arg	Glu	Arg	Glu	Leu	Ser	Trp	Phe	Pro	Phe	His	Leu	Phe	Ser	Gly
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Cys	Phe	Lys	Ala	Asn	Ile	Pro	Val	Pro	Asn	Val	Leu	Cys	Gly	Leu	Asn
			85					90				95			
Pro	Gly	Arg	Gly	Gln	Gly	His	Ile	Gln	Val	Gly	Leu	Ala	Ser	Ser	Thr
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Thr	Phe	Trp	Pro	Gln	Gln	Arg	Met	Gly	Phe	His	Gln	Ser	Leu	Ser	Thr
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<210> 5841

<211> 3411

<212> DNA

<213> Homo sapiens

<400> 5841

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<210> 5846

<211> 257

<212> PRT

<213> Homo sapiens

<400> 5846

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Thr	Ser	Gly	Lys	Tyr	Gln	Asp	Val	Tyr	Val	Glu	Leu	Ser	His	Ile	Lys

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Thr Arg Ser Glu Arg Glu Ile Glu Gln Leu Lys Glu His Leu Arg Leu		
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<210> 5847

<211> 1021

<212> DNA

<213> Homo sapiens

<400> 5847

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<210> 5848

<211> 120

<212> PRT

<213> Homo sapiens

<400> 5848

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 35 40 45
 Gly Ser Ile Arg Gly Ala Ala Pro Val Ala Val Glu Pro Gly Ala Ala
 50 55 60
 Val Arg Ser Leu Leu Ser Pro Gly Leu Leu Pro His Leu Leu Pro Ala
 65 70 75 80
 Leu Gly Phe Lys Asn Lys Thr Val Leu Lys Lys Arg Cys Lys Asp Cys
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 Tyr Leu Val Lys Arg Arg Gly Arg Trp Tyr Val Tyr Cys Lys Thr His
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<210> 5849

<211> 3174

<212> DNA

<213> Homo sapiens

<400> 5849

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<211> 154

<212> PRT

<213> Homo sapiens

<400> 5850

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Gly	Pro	Ile	His	Ile	Ala	Glu	Gly	Gly	Arg	Gly	Arg	Pro	Pro	Pro	Gly
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Ser	Ala	Ser	Asn	Pro	Gln	Pro	Pro	Gly	Ser	Pro	His	Cys	Pro	Ser	Ala
		65			70				75					80	
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			85					90						95	
Val	Pro	Arg	Val	Arg	Arg	Pro	Gly	Leu	Ala	Gly	His	Pro	Val	Thr	His
		100					105						110		
Arg	Ile	Asn	Arg	Lys	Thr	Ala	Ser	Pro	Pro	Asn	Leu	Cys	Pro	Arg	His
		115				120					125				
Asn	Met	Ser	Arg	Ser	Glu	Ser	Cys	Thr	Pro	Arg	Ser	Arg	Ala	Pro	Leu
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<210> 5851

<211> 488

<212> DNA

<213> Homo sapiens

<400> 5851

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<210> 5852

<211> 82

<212> PRT

<213> Homo sapiens

<400> 5852

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Asn	Lys	Thr	Ser	Glu	Asp	Val	Thr	Met	Ala	Ala	Ala	Ser	Pro	Val	Thr
			20					25					30		
Leu	Thr	Lys	Gly	Thr	Ser	Ala	Ala	His	Leu	Asn	Ser	Met	Glu	Val	Thr
		35				40					45				
Thr	Glu	Asp	Thr	Ser	Arg	Thr	Asp	Ala	Tyr	Glu	Ser	Tyr	Lys	Lys	Lys
	50				55				60						
Asp	Tyr	Thr	Gln	Val	Asp	Tyr	Leu	Ile	Asn	Gly	Met	Tyr	Ala	Asp	Ser
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<210> 5853

<211> 487

<212> DNA

<213> Homo sapiens

<400> 5853

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<210> 5854

<211> 68

<212> PRT

<213> Homo sapiens

<400> 5854

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 Ser Trp Pro Leu
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<210> 5855

<211> 362

<212> DNA

<213> Homo sapiens

<400> 5855

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<210> 5856

<211> 113

<212> PRT

<213> Homo sapiens

<400> 5856

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 Ser Pro Pro Asp Pro Pro Ala Gly Thr Cys Trp Gly Leu Trp Gly Pro
 35 40 45
 Lys Arg Glu Gly Val Asn Glu Val Val Ala Glu Val Leu Leu Ala Ala
 50 55 60
 His Glu Gly Val Gly Asp Gln Gly Glu Ala Gly Ala His Pro Val Leu
 65 70 75 80
 Ser Asp Ala Gly Leu Leu Val Leu Gly Leu Arg Ala Ala Leu Gly Glu
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 His Gln Ala His Leu Gly Ser Ala Leu Asn Glu His Gln Arg Val Leu
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<210> 5857

<211> 1751

<212> DNA

<213> Homo sapiens

<400> 5857

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<210> 5858

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5858

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Gly	Gly	Gln	Gly	Arg	Gly	Gly	Glu	Lys	Pro	Pro	His	Leu	Ala	Ala	Leu
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	50				55					60					
His	Leu	Ala	Gly	Val	Pro	Leu	Ile	Gly	Trp	Val	Leu	Arg	Ala	Ala	Leu
65				70				75					80		
Asp	Ser	Gly	Ala	Phe	Gln	Ser	Val	Trp	Val	Ser	Thr	Asp	His	Asp	Glu
		85				90						95			
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Ile Arg Glu Glu Gly Tyr Asp Ser Val Phe Ser Val Val Arg Arg His		
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Gln Phe Arg Trp Ser Glu Ile Gln Lys Gly Val Arg Glu Val Thr Glu		
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Pro Leu Asn Leu Asn Pro Ala Lys Arg Pro Arg Arg Gln Asp Trp Asp		
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Gly Glu Leu Tyr Glu Asn Gly Ser Phe Tyr Phe Ala Lys Arg His Leu		
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Ile Glu Met Gly Tyr Leu Gln Gly Gly Lys Met Ala Tyr Tyr Glu Met		
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245	250	255
Ala Glu Gln Arg Val Leu Arg Tyr Gly Tyr Phe Gly Lys Glu Lys Leu		
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Lys Glu Ile Lys Leu Leu Val Cys Asn Ile Asp Gly Cys Leu Thr Asn		
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Gly His Ile Tyr Val Ser Gly Asp Gln Lys Glu Ile Ile Ser Tyr Asp		
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Leu Lys Leu Asp Cys Lys Met Glu Val Ser Val Ser Asp Lys Leu Ala		
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Val Val Asp Glu Trp Arg Lys Glu Met Gly Leu Cys Trp Lys Glu Val		
355	360	365
Ala Tyr Leu Gly Asn Glu Val Ser Asp Glu Glu Cys Leu Lys Arg Val		
370	375	380
Gly Leu Ser Gly Ala Pro Ala Asp Ala Cys Ser Thr Ala Gln Lys Ala		
385	390	395
Val Gly Tyr Ile Cys Lys Cys Asn Gly Gly Arg Gly Ala Ile Arg Glu		
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<210> 5859

<211> 2267

<212> DNA

<213> Homo sapiens

<400> 5859

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<210> 5860

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5860

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				20				25					30		
Ser	Arg	Ala	Ser	Glu	Ala	Ser	Gly	Ser	Leu	Leu	Leu	Arg	Phe	Phe	Leu
				35			40					45			
Gln	Met	Gly	Leu	Gly	Arg	Cys	Arg	Phe	Cys	Phe	Ser	Pro	Trp	Leu	Pro
	50					55					60				
Val	Arg	Pro	Gln	Pro	Ser	Gly	Cys	Asp	Ile	Ile	Glu	Ser	Ala	Val	Ser
65					70				75					80	
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<210> 5861

<211> 1951

<212> DNA

<213> Homo sapiens

<400> 5861

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<210> 5862
 <211> 514
 <212> PRT
 <213> Homo sapiens

<400> 5862

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Pro Asp Leu Lys Val Ile Tyr Ile Leu Val Arg Pro Lys Ala Gly Gln
      35           40           45
Thr Leu Gln Gln Arg Val Phe Gln Ile Leu Asp Ser Lys Leu Phe Glu
      50           55           60
Lys Val Lys Glu Val Cys Pro Asn Val His Glu Lys Ile Arg Ala Ile
      65           70           75           80
Tyr Ala Asp Leu Asn Gln Asn Asp Phe Ala Ile Ser Lys Glu Asp Met
      85           90           95
Gln Glu Leu Leu Ser Cys Thr Asn Ile Ile Phe His Cys Ala Ala Thr
      100          105          110
Val Arg Phe Asp Asp Thr Leu Arg His Ala Val Gln Leu Asn Val Thr
      115          120          125
Ala Thr Arg Gln Leu Leu Leu Met Ala Ser Gln Met Pro Lys Leu Glu
      130          135          140
Ala Phe Ile His Ile Ser Thr Ala Tyr Ser Asn Cys Asn Leu Lys His
      145          150          155          160
Ile Asp Glu Val Ile Tyr Pro Cys Pro Val Glu Pro Lys Lys Lys Ile
      165          170          175
Ile Asp Ser Leu Glu Trp Leu Asp Asp Ala Ile Ile Asp Glu Ile Thr
      180          185          190
Pro Lys Leu Ile Arg Asp Trp Pro Asn Ile Tyr Thr Tyr Thr Lys Ala
      195          200          205
Leu Gly Glu Met Val Val Gln Gln Glu Ser Arg Asn Leu Asn Ile Ala
      210          215          220
Ile Ile Arg Pro Ser Ile Val Gly Ala Thr Trp Gln Glu Pro Phe Pro
      225          230          235          240
Gly Trp Val Asp Asn Ile Asn Gly Pro Asn Gly Ile Ile Ile Ala Thr
      245          250          255
Gly Lys Gly Phe Leu Arg Ala Ile Lys Ala Thr Pro Met Ala Val Ala
      260          265          270
Asp Val Ile Pro Val Asp Thr Val Val Asn Leu Met Leu Ala Val Gly
      275          280          285
Trp Tyr Thr Ala Val His Arg Pro Lys Ser Thr Leu Val Tyr His Ile
      290          295          300
Thr Ser Gly Asn Met Asn Pro Cys Asn Trp His Lys Met Gly Val Gln
      305          310          315          320
Val Leu Ala Thr Phe Glu Lys Ile Pro Phe Glu Arg Pro Phe Arg Arg
      325          330          335
Pro Asn Ala Asn Phe Thr Ser Asn Ser Phe Thr Ser Gln Tyr Trp Asn
      340          345          350
Ala Val Ser His Arg Ala Pro Ala Ile Ile Tyr Asp Cys Tyr Leu Arg
      355          360          365
Leu Thr Gly Arg Lys Pro Arg Met Thr Lys Leu Met Asn Arg Leu Leu

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 405 410 415
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 420 425 430
 Ile Glu Asn Tyr Val Leu Gly Val Lys Lys Tyr Leu Leu Lys Glu Asp
 435 440 445
 Met Ala Gly Ile Pro Lys Ala Lys Gln Arg Leu Lys Arg Leu Arg Asn
 450 455 460
 Ile His Tyr Leu Phe Asn Thr Ala Leu Phe Leu Ile Ala Trp Arg Leu
 465 470 475 480
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<210> 5863

<211> 438

<212> DNA

<213> Homo sapiens

<400> 5863

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<210> 5864

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5864

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 Cys Gln Tyr Leu Ser Tyr Val Pro Phe Met Ala Glu Tyr Gln Ser Lys

5033

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 35 40 45
 Phe Val Leu Pro Thr Glu Gln Phe His Leu Gly Lys Ile Glu Glu Leu
 50 55 60
 Leu Val Glu Arg Thr Gly Ala Pro Phe Cys Ser Pro Thr Ser Ser Gly
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 Trp Arg Arg Ser Arg Ala Ser Ala Ile Ala Ala Gly Val His Pro Gln
 85 90 95
 Asp Ala Met Arg Ser Val Thr Lys Gln Ala Ile Arg Glu Ala Arg Leu
 100 105 110
 Lys Glu Ile Lys Glu Glu Leu Leu His Ser Glu Lys Leu Lys Thr Tyr
 115 120 125
 Phe Glu Asp Asn Pro Arg Asp Leu Gln Leu Leu Arg His Asp Leu Pro
 130 135 140
 Leu His Pro Ala Val Val Lys Pro His Leu Gly His Val Pro Asp Tyr
 145 150 155 160
 Leu Val Pro Pro Ala Leu Arg Gly Leu Val Arg Pro His Lys Lys Arg
 165 170 175
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<210> 5867
 <211> 1882
 <212> DNA
 <213> Homo sapiens

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<210> 5868
<211> 131
<212> PRT
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<400> 5868
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50 55 60
Ile Val Arg Asp Gly Arg Leu Tyr Ala Ser Glu Asn His Gln Glu Ile
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Leu Lys Asp Lys Lys Leu Ile Lys Ala Phe Phe Glu Val Leu Ala His
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Pro Gln Asn Tyr Phe Lys Tyr Thr Glu Lys His Lys Glu Met Leu Pro
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<210> 5869
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<212> DNA
<213> Homo sapiens

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<211> 129

<212> PRT

<213> Homo sapiens

<400> 5870

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Ser	Ser	Leu	Gln	Tyr	Gln	Ile	Gln	Ser	Val	Val	Arg	Met	Lys	Cys	Gly
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<210> 5871

<211> 2217

<212> DNA

<213> Homo sapiens

<400> 5871

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<212> PRT

<213> Homo sapiens

<400> 5872

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<211> 3463

<212> DNA

<213> Homo sapiens

<400> 5873

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<212> PRT

<213> Homo sapiens

<400> 5874

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Ser Glu Gly Gly Val Arg Ile Thr Pro Phe Asn Leu Gln Glu Glu Met
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<211> 5933

<212> DNA

<213> Homo sapiens

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<211> 1648

<212> PRT

<213> Homo sapiens

<400> 5876

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Tyr	Cys	Gly	Met	His	Ser	Pro	Asn	Ile	Glu	Val	Val	Leu	Val	Lys Ile
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Gly	Leu	Gln	Ser	Thr	Arg	Ile	Gly	Leu	Lys	Leu	Ile	Asp	Ile	Leu Leu
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Arg	Asn	Cys	Ala	Ala	Ser	Gly	Ser	Asp	Pro	Thr	Asp	Leu	Asn	Ser Pro
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Met	Lys	Arg	Ser	Gly	Arg	Met	Asn	Tyr	Met	Cys	Pro	Asn	Ser	Ser Thr
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Met	Ser	Leu	Pro	Cys	Asn	Met	Val	Leu	Lys	Lys	Ala	Val	Asp	Ser Leu
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Asp	Asp	Ser	Lys	Asn	Ala	Gln	Ala	Pro	Leu	Ala	Leu	Thr	Glu	Ser His
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Phe	Cys	Phe	Ser	His	Ile	Ser	Ser	Ser	Glu	Ser	Ile	Ala	Gln	Ser Ile
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Asp	Ile	Ser	Gln	Asp	Lys	Leu	Arg	Arg	His	His	Val	Pro	Gln	Gln Cys
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Ser	Glu	Val	Asn	Pro	Leu	Trp	Thr	Ala	Leu	Leu	Phe	Leu	Leu	Cys His

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Glu Tyr Ser Lys Lys Ala Ala Met Lys Pro Lys Pro Leu Ser Val Leu		1295
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Asp Thr Pro Tyr Ala Asn Gly Cys Phe Glu Phe Asp Val Tyr Phe Pro					
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Gln Asp Tyr Pro Ser Ser Pro Pro Leu Val Asn Leu Glu Thr Thr Gly					
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Cys Leu Ser Ile Leu Asn Thr Trp His Gly Arg Pro Glu Glu Lys Trp					
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<212> PRT

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<400> 5878

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<400> 5879

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<210> 5880
 <211> 185
 <212> PRT
 <213> Homo sapiens

<400> 5880

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Gly Ser Gln Lys Lys Lys Arg Thr Ile Leu Gln Phe Leu Thr Asn Tyr
      35           40           45
Phe Tyr Asp Val Glu Ala Leu Arg Asp Tyr Leu Leu Gln Arg Glu Met
      50           55           60
Tyr Lys Val His Glu Lys Asn Arg Ser Tyr Thr Trp Leu Glu Lys Gln
      65           70           75           80
His Gly Pro Tyr Gly Ala Gly Ala Phe Phe Ile Leu Lys Gln Gly Gly
      85           90           95
Ala Val Lys Phe Arg Asp Lys Glu Trp Ile Arg Pro Asp Lys Tyr Gly
      100          105          110
His Phe Ser Gln Glu Phe Trp Asn Phe Cys Glu Val Pro Val Glu Ala
      115          120          125
Val Asp Ala Gly Asp Cys Asp Ile Asn Tyr Glu Gly Leu Asp Asn Leu
      130          135          140
Arg Thr Ser Ala Gly Trp Thr Ser Arg Thr Ser Leu Pro Cys Pro Thr
      145          150          155          160
Leu Ala Ser Leu Arg Tyr Trp Trp Arg Arg Cys Cys Pro Ile Ala Arg
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Leu Trp Glu Ser Thr Gly Leu Arg Ala
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<210> 5881
 <211> 327
 <212> DNA
 <213> Homo sapiens

<400> 5881

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<210> 5882
 <211> 109
 <212> PRT

<213> Homo sapiens

<400> 5882

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Lys Arg Ala Ser Val Asp Val Asp Leu Leu Ala Pro Arg Ser Pro Met
             20             25             30
Ala Lys Glu Asn Met Val Thr Phe Ser His Thr Leu Pro Arg Ala Ser
             35             40             45
Ala Pro Ser Leu Asp Asp Pro Ala Arg Arg His Met Thr Ile His Val
             50             55             60
Pro Leu Asp Ala Ser Arg Ser Lys Gln Leu Ile Ser Glu Trp Lys Gln
65             70             75             80
Lys Ser Leu Glu Gly Arg Gly Leu Gly Leu Pro Asp Asp Ala Ser Pro
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Gly His Leu Arg Ala Pro Ala Glu Pro Met Pro Glu Xaa
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<210> 5883

<211> 579

<212> DNA

<213> Homo sapiens

<400> 5883

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180
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240
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<210> 5884

<211> 71

<212> PRT

<213> Homo sapiens

<400> 5884

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Met Gly Asn Gly Thr Glu Glu Asp Tyr Asn Phe Val Phe Lys Val Val
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Leu Ile Gly Glu Ser Gly Val Gly Lys Thr Asn Leu Leu Ser Arg Phe

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Thr	Arg	Asn	Glu	Phe	Ser	His	Asp	Ser	Arg	Thr	Thr	Ile	Gly	Val	Glu
	35					40					45				
Phe	Ser	Thr	Arg	Thr	Val	Met	Leu	Gly	Thr	Ala	Ala	Val	Lys	Ala	Gln
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<210> 5885

<211> 1905

<212> DNA

<213> Homo sapiens

<400> 5885

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<210> 5886

<211> 265

<212> PRT

<213> Homo sapiens

<400> 5886

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 20 25 30
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 35 40 45
 Lys Ala Leu Leu Ala Ala Gly Ser Ala Ala Met Ala Leu Tyr Asn Pro
 50 55 60
 Tyr Arg His Asp Met Val Ala Val Leu Gly Glu Thr Thr Gly His Arg
 65 70 75 80
 Thr Leu Lys Val Leu Arg Asp Gln Met Arg Arg Asp Pro Glu Gly Ala
 85 90 95
 Gln Ile Leu Gln Glu Arg Pro Arg Ile Ser Thr Ser Thr Leu Asp Leu
 100 105 110
 Gly Lys Leu Gln Ser Leu Pro Glu Gly Ser Leu Gly Arg Glu Tyr Leu
 115 120 125
 Arg Phe Leu Asp Val Asn Arg Val Ser Pro Asp Thr Arg Ala Pro Thr
 130 135 140
 Arg Phe Val Asp Asp Glu Leu Ala Tyr Val Ile Gln Arg Tyr Arg
 145 150 155 160
 Glu Val His Asp Met Leu His Thr Leu Leu Gly Met Pro Thr Asn Ile
 165 170 175
 Leu Gly Glu Ile Val Val Lys Trp Phe Glu Ala Val Gln Thr Gly Leu

	180		185		190
Pro	Met	Cys	Ile	Leu	Gly
	195		200		205
Gln	Ser	Leu	Gln	Val	Leu
	210		215		220
Asn	Gly	Arg	Arg	Ala	Pro
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<210> 5887

<211> 3779

<212> DNA

<213> Homo sapiens

<400> 5887

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<210> 5888

<211> 166

<212> PRT

<213> Homo sapiens

<400> 5888

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		20					25					30			
Pro	Glu	Tyr	Met	Trp	Phe	Leu	Leu	Tyr	Cys	Glu	Gly	Thr	Arg	Phe	Thr
		35				40					45				
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Pro	Val	Leu	Lys	Tyr	His	Leu	Leu	Pro	Arg	Thr	Lys	Gly	Phe	Thr	Thr
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Leu	Asn	Phe	Arg	Gly	Asn	Lys	Asn	Pro	Ser	Leu	Leu	Gly	Ile	Leu	Tyr				
			100					105					110						
Gly	Lys	Lys	Tyr	Glu	Ala	Asp	Met	Cys	Val	Arg	Arg	Phe	Pro	Leu	Glu				
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Tyr	Gln	Glu	Lys	Asp	Ala	Leu	Gln	Glu	Val	Lys	Thr	Leu	Asp	Gly	Met				
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<210> 5889

<211> 2198

<212> DNA

<213> Homo sapiens

<400> 5889

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 2100
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<210> 5890

<211> 118

<212> PRT

<213> Homo sapiens

<400> 5890

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			20					25					30		
Glu	Cys	Ser	Gly	Thr	Ile	Thr	Ala	His	Cys	Ser	Leu	Asp	Phe	Pro	Gly
		35					40					45			
Ser	Ser	His	Ser	Pro	Thr	Ser	Ala	Ser	Gln	Ala	Val	Gly	Thr	Thr	Gly
		50				55					60				
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Ala	Val	Pro	Pro	Gly	Ser	Pro	Gly	Val	Gly	Thr	Gln	Cys	Leu	Gly	Gly
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Ala	Leu	Gly	Cys	Pro	Thr	Leu	Gly	Ala	Thr	Ala	Arg	Arg	Gly	Arg	Ser
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<210> 5891

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5891

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1200

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<210> 5892

<211> 212

<212> PRT

<213> Homo sapiens

<400> 5892

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			20					25					30		
Phe	Arg	Asn	Gly	Ala	Val	Tyr	Gly	Ala	Lys	Ile	Arg	Ala	Pro	His	Ala
		35					40					45			
Leu	Val	Met	Thr	Phe	Leu	Phe	Arg	Asn	Gly	Ser	Leu	Gln	Glu	Lys	Leu
		50				55					60				
Trp	Ala	Ile	Leu	Gln	Ala	Thr	Tyr	Ile	His	Ser	Trp	Asn	Leu	Ala	Arg
65					70					75				80	
Phe	Val	Phe	Thr	Tyr	Lys	Gly	Leu	Arg	Ala	Leu	Gln	Ser	Tyr	Ile	Gln
				85					90					95	
Gly	Lys	Thr	Tyr	Pro	Ala	His	Ala	Phe	Leu	Ala	Ala	Phe	Leu	Gly	Gly
			100					105					110		
Ile	Leu	Val	Phe	Gly	Glu	Asn	Asn	Asn	Ile	Asn	Ser	Gln	Ile	Asn	Met
		115					120					125			
Tyr	Leu	Leu	Ser	Arg	Val	Leu	Phe	Ala	Leu	Ser	Arg	Leu	Ala	Val	Glu
		130				135					140				
Lys	Gly	Tyr	Ile	Pro	Glu	Pro	Arg	Trp	Asp	Pro	Phe	Pro	Leu	Leu	Thr
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Ala	Val	Val	Trp	Gly	Leu	Val	Leu	Trp	Leu	Phe	Glu	Tyr	His	Arg	Ser
			165					170						175	
Thr	Leu	Gln	Pro	Ser	Leu	Gln	Ser	Ser	Met	Thr	Tyr	Leu	Tyr	Glu	Asp
			180					185					190		
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<210> 5893

<211> 1389

<212> DNA

<213> Homo sapiens

<400> 5893

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<210> 5894

<211> 260

<212> PRT

<213> Homo sapiens

<400> 5894

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      35           40           45
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      50           55           60
Tyr Cys Ser Thr Arg Ile Tyr Ala Ser Met Lys Cys Pro Asp Gln Lys
      65           70           75           80
Cys Leu Tyr Thr Cys Gln Ile Lys Asp Gly Gly Val Gln Pro Gln Phe
      85           90           95
Glu Ile Val Pro Glu Asp Asp Pro Gln Asn Ala Ile Val Ser Ser Ser
      100          105          110
Ala Asp Ala Cys His Ala Glu Leu Leu Arg Thr Ile Ser Thr Thr Met
      115          120          125
Gly Lys Leu Met Pro Asn Leu Leu Pro Ala Gly Ala Asp Phe Phe Gly
      130          135          140
Phe Ser His Pro Ala Ile His Asn Leu Ile Gln Ser Cys Pro Gly Ala
      145          150          155          160
Arg Lys Cys Ile Asn Tyr Gln Trp Val Lys Phe Asp Val Cys Lys Pro
      165          170          175
Gly Asp Gly Gln Leu Pro Glu Gly Leu Pro Glu Asn Asp Ala Ala Met
      180          185          190
Ser Phe Glu Ala Phe Gln Arg Gln Ile Phe Asp Glu Asp Gln Asn Asp
      195          200          205
Pro Leu Leu Pro Gly Ser Leu Asp Leu Pro Glu Leu Gln Pro Ala Ala
      210          215          220
Phe Val Ser Ser Tyr Gln Pro Met Tyr Leu Thr His Glu Pro Leu Val
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<210> 5895

<211> 2748

<212> DNA

<213> Homo sapiens

<400> 5895

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420

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<210> 5896

<211> 261

<212> PRT

<213> Homo sapiens

<400> 5896

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			20					25					30		
Arg	Asp	Leu	Gly	Gly	Ser	Ser	Ala	Ala	Thr	Glu	Ala	Val	Ala	Ile	Leu
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Thr	Ala	Thr	Tyr	Pro	Val	Gly	His	Met	Pro	Tyr	Gly	Trp	Leu	Thr	Glu
	50					55					60				
Ile	Arg	Ala	Val	Tyr	Pro	Ala	Phe	Asp	Lys	Asn	Asn	Pro	Ser	Asn	Lys
65				70					75					80	
Leu	Val	Ser	Thr	Ser	Asn	Thr	Val	Thr	Ala	Ala	His	Ile	Lys	Lys	Phe
			85					90					95		
Thr	Phe	Val	Cys	Met	Ala	Leu	Ser	Leu	Thr	Leu	Cys	Phe	Val	Met	Phe
		100					105					110			
Trp	Thr	Pro	Asn	Val	Ser	Glu	Lys	Ile	Leu	Ile	Asp	Ile	Ile	Gly	Val
	115					120					125				
Asp	Phe	Ala	Phe	Ala	Glu	Leu	Cys	Val	Val	Pro	Leu	Arg	Ile	Phe	Ser
	130				135						140				
Phe	Phe	Pro	Val	Pro	Val	Thr	Val	Arg	Ala	His	Leu	Thr	Gly	Trp	Leu
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Met	Thr	Leu	Lys	Lys	Thr	Phe	Val	Leu	Ala	Pro	Ser	Ser	Val	Leu	Arg
			165				170						175		
Ile	Ile	Val	Leu	Ile	Ala	Ser	Leu	Val	Val	Leu	Pro	Tyr	Leu	Gly	Val

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His	Gly	Ala	Thr	Leu	Gly	Val	Gly	Ser	Leu	Leu	Ala	Gly	Phe	Val	Gly
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Glu	Ser	Thr	Met	Val	Ala	Ile	Ala	Ala	Cys	Tyr	Val	Tyr	Arg	Lys	Gln
	210				215						220				
Lys	Lys	Lys	Met	Glu	Asn	Glu	Ser	Ala	Thr	Glu	Gly	Glu	Asp	Ser	Ala
	225				230					235				240	
Met	Thr	Asp	Met	Pro	Pro	Thr	Glu	Glu	Val	Thr	Asp	Ile	Val	Glu	Met
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<210> 5897

<211> 1930

<212> DNA

<213> Homo sapiens

<400> 5897

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1080

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<210> 5898

<211> 242

<212> PRT

<213> Homo sapiens

<400> 5898

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			20					25					30		
Glu	Ile	Cys	Ala	Asp	Glu	Phe	Pro	Gly	Ser	Ser	Ala	Thr	Tyr	Arg	Ile
		35					40					45			
Leu	Glu	Val	Gly	Cys	Gly	Val	Gly	Asn	Thr	Val	Phe	Pro	Ile	Leu	Gln
	50				55						60				
Thr	Asn	Asn	Asp	Pro	Gly	Leu	Phe	Val	Tyr	Cys	Cys	Asp	Phe	Ser	Ser
65				70					75					80	
Thr	Ala	Ile	Glu	Leu	Val	Gln	Thr	Asn	Ser	Glu	Tyr	Asp	Pro	Ser	Arg
			85					90						95	
Cys	Phe	Ala	Phe	Val	His	Asp	Leu	Cys	Asp	Glu	Glu	Lys	Ser	Tyr	Pro
		100					105						110		
Val	Pro	Lys	Gly	Ser	Leu	Asp	Ile	Ile	Ile	Leu	Ile	Phe	Val	Leu	Ser
		115				120						125			
Ala	Ile	Val	Pro	Asp	Lys	Met	Gln	Lys	Ala	Ile	Asn	Arg	Leu	Ser	Arg

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Asp Met Ala Gln Leu Arg Phe Lys Lys Gly Gln Cys Leu Ser Gly Asn				
	165	170	175	
Phe Tyr Val Arg Gly Asp Gly Thr Arg Val Tyr Phe Phe Thr Gln Glu				
	180	185	190	
Glu Leu Asp Thr Leu Phe Thr Thr Ala Gly Leu Glu Lys Val Gln Asn				
	195	200	205	
Leu Val Asp Arg Arg Leu Gln Val Asn Arg Gly Lys Gln Leu Thr Met				
	210	215	220	
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225	230	235	240	
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<210> 5899

<211> 1589

<212> DNA

<213> Homo sapiens

<400> 5899

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<210> 5900

<211> 345

<212> PRT

<213> Homo sapiens

<400> 5900

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			20					25					30		
Ile	Pro	Thr	Ile	Ile	Arg	Asp	Glu	Glu	Leu	Lys	Thr	Arg	Gly	Phe	Gly
		35				40					45				
Gly	Ile	Tyr	Gly	Val	Gly	Lys	Ala	Ala	Leu	His	Pro	Pro	Ala	Leu	Ala
	50					55					60				
Val	Leu	Ser	His	Thr	Pro	Asp	Gly	Ala	Thr	Gln	Thr	Ile	Ala	Trp	Val
65					70				75					80	
Gly	Lys	Gly	Ile	Val	Tyr	Asp	Thr	Gly	Gly	Leu	Ser	Ile	Lys	Gly	Lys
			85					90						95	
Thr	Thr	Met	Pro	Gly	Met	Lys	Arg	Asp	Cys	Gly	Gly	Ala	Ala	Ala	Val
			100					105					110		
Leu	Gly	Ala	Phe	Arg	Ala	Ala	Ile	Lys	Gln	Gly	Phe	Lys	Asp	Asn	Leu
		115					120					125			
His	Ala	Val	Phe	Cys	Leu	Ala	Glu	Asn	Ser	Val	Gly	Pro	Asn	Ala	Thr
	130					135					140				
Arg	Pro	Asp	Asp	Ile	His	Leu	Leu	Tyr	Ser	Gly	Lys	Thr	Val	Glu	Ile
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Asn	Asn	Thr	Asp	Ala	Glu	Gly	Arg	Leu	Val	Leu	Ala	Asp	Gly	Val	Ser
			165					170					175		
Tyr	Ala	Cys	Lys	Asp	Leu	Gly	Ala	Asp	Ile	Ile	Leu	Asp	Met	Ala	Thr
			180					185					190		
Leu	Thr	Gly	Ala	Gln	Gly	Ile	Ala	Thr	Gly	Lys	Tyr	His	Ala	Ala	Val

195	200	205
Leu Thr Asn Ser Ala Glu Trp	Glu Ala Ala Cys Val Lys Ala Gly Arg	
210	215	220
Lys Cys Gly Asp Leu Val His Pro	Leu Val Tyr Cys Pro Glu Leu His	
225	230	235
Phe Ser Glu Phe Thr Ser Ala Val	Ala Asp Met Lys Asn Ser Val Ala	
245	250	255
Asp Arg Asp Asn Ser Pro Ser Ser	Cys Ala Gly Leu Phe Ile Ala Ser	
260	265	270
His Ile Gly Phe Asp Trp Pro Gly	Val Trp Val His Leu Asp Ile Ala	
275	280	285
Ala Pro Val His Ala Gly Glu Arg	Ala Thr Gly Phe Gly Val Ala Leu	
290	295	300
Leu Leu Ala Leu Phe Gly Arg Ala	Ser Glu Asp Pro Leu Leu Asn Leu	
305	310	315
Val Ser Pro Leu Gly Cys Glu Val	Asp Val Glu Glu Gly Asp Leu Gly	
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Arg Asp Ser Lys Arg Arg Arg Leu	Val	
340	345	

<210> 5901

<211> 984

<212> DNA

<213> Homo sapiens

<400> 5901

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 120
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<210> 5902

<211> 328

<212> PRT

<213> Homo sapiens

<400> 5902

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			20					25					30		
Glu	Ile	Glu	Ala	Lys	Leu	Asp	Lys	Leu	Val	Lys	Leu	Cys	Ser	Gly	Met
		35				40						45			
Val	Glu	Ala	Gly	Lys	Ala	Tyr	Val	Ser	Thr	Ser	Arg	Leu	Phe	Val	Ser
	50					55					60				
Gly	Val	Arg	Asp	Leu	Ser	Gln	Gln	Cys	Gln	Gly	Asp	Thr	Val	Ile	Ser
65				70					75					80	
Glu	Cys	Leu	Gln	Arg	Phe	Ala	Asp	Ser	Leu	Gln	Glu	Val	Val	Asn	Tyr
			85					90						95	
His	Met	Ile	Leu	Phe	Asp	Gln	Ala	Gln	Arg	Ser	Val	Arg	Gln	Gln	Leu
			100					105					110		
Gln	Ser	Phe	Val	Lys	Glu	Asp	Val	Arg	Lys	Phe	Lys	Glu	Thr	Lys	Lys
		115				120						125			
Gln	Phe	Asp	Lys	Val	Arg	Glu	Asp	Leu	Glu	Leu	Ser	Leu	Val	Arg	Asn
	130					135					140				
Ala	Gln	Ala	Pro	Arg	His	Arg	Pro	His	Glu	Val	Glu	Glu	Ala	Thr	Gly
145					150				155					160	
Ala	Leu	Thr	Leu	Thr	Arg	Lys	Cys	Phe	Arg	His	Leu	Ala	Leu	Asp	Tyr
			165					170						175	
Val	Leu	Gln	Ile	Asn	Val	Leu	Gln	Ala	Lys	Lys	Lys	Phe	Glu	Ile	Leu
		180				185						190			
Asp	Ser	Met	Leu	Ser	Phe	Met	His	Ala	Gln	Ser	Ser	Phe	Phe	Gln	Gln
	195					200						205			
Gly	Tyr	Ser	Leu	Leu	His	Gln	Leu	Asp	Pro	Tyr	Met	Lys	Lys	Leu	Ala
	210					215					220				
Ala	Glu	Leu	Asp	Gln	Leu	Val	Ile	Asp	Ser	Ala	Val	Glu	Lys	Arg	Glu
225				230					235					240	
Met	Glu	Arg	Lys	His	Ala	Ala	Ile	Gln	Gln	Arg	Thr	Leu	Arg	Asp	Phe
			245					250						255	
Ser	Tyr	Asp	Glu	Ser	Lys	Val	Glu	Phe	Asp	Val	Asp	Ala	Pro	Ser	Gly
		260					265					270			
Val	Val	Met	Glu	Gly	Tyr	Leu	Phe	Lys	Arg	Ala	Ser	Asn	Xaa	Phe	Lys
	275					280						285			
Thr	Trp	Asn	Arg	Arg	Trp	Phe	Ser	Ile	Gln	Asn	Ser	Gln	Leu	Val	Tyr
	290				295						300				
Gln	Lys	Lys	Leu	Lys	Asp	Ala	Leu	Thr	Val	Val	Val	Asp	Asp	Leu	Arg
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325

<210> 5903

<211> 3734

<212> DNA

<213> Homo sapiens

<400> 5903

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<210> 5904

<211> 308

<212> PRT

<213> Homo sapiens

<400> 5904

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Ala	Lys	Phe	Arg	Glu	Asn	Val	Gln	Asp	Val	Leu	Pro	Ala	Leu	Pro	Asn
			20					25					30		
Pro	Asp	Asp	Tyr	Phe	Leu	Leu	Arg	Trp	Leu	Arg	Ala	Arg	Ser	Phe	Asp
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Leu	Gln	Lys	Ser	Glu	Ala	Met	Leu	Arg	Lys	His	Val	Glu	Phe	Arg	Lys
	50					55					60				
Gln	Lys	Asp	Ile	Asp	Asn	Ile	Ile	Ser	Trp	Gln	Pro	Pro	Glu	Val	Ile
65					70					75				80	
Gln	Gln	Tyr	Leu	Ser	Gly	Gly	Met	Cys	Gly	Tyr	Asp	Leu	Asp	Gly	Cys
			85						90					95	
Pro	Val	Trp	Tyr	Asp	Ile	Ile	Gly	Pro	Leu	Asp	Ala	Lys	Gly	Leu	Leu
			100					105					110		
Leu	Ser	Ala	Ser	Lys	Gln	Asp	Met	Ile	Arg	Lys	Gly	Ile	Lys	Val	Cys
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Glu	Leu	Leu	Leu	His	Glu	Cys	Glu	Leu	Gln	Thr	Gln	Lys	Leu	Gly	Arg
	130					135					140				
Lys	Ile	Glu	Met	Ala	Leu	Met	Val	Phe	Asp	Met	Glu	Gly	Leu	Ser	Leu
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Lys	His	Leu	Trp	Lys	Pro	Ala	Val	Glu	Val	Tyr	Gln	Gln	Phe	Phe	Ser

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	180		185		190
Arg Ala Pro Lys Leu Phe Pro Met Ala Phe Asn Leu Val Lys Ser Phe					
	195		200		205
Met Ser Glu Asp Thr Arg Lys Lys Ile Met Val Leu Gly Ala Asn Trp					
	210		215		220
Lys Glu Val Leu Leu Lys His Ile Ser Pro Asp Gln Val Pro Val Glu					
225		230		235	240
Tyr Gly Gly Thr Met Thr Asp Pro Asp Gly Asn Pro Lys Cys Lys Ser					
	245		250		255
Lys Ile Asn Tyr Gly Gly Asp Ile Pro Arg Lys Tyr Tyr Val Arg Asp					
	260		265		270
Gln Val Lys Gln Gln Tyr Glu His Ser Val Gln Ile Ser Arg Gly Ser					
	275		280		285
Ser Gln Gln Val Glu Tyr Glu Ile Leu Phe Pro Gly Cys Val Leu Arg					
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Trp Gln Phe Leu					
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<210> 5905

<211> 2280

<212> DNA

<213> Homo sapiens

<400> 5905

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Pro Asp Ser Arg Ala Leu His Tyr Met Lys Lys Leu Tyr Lys Thr Tyr
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Ala Thr Lys Glu Gly Ile Pro Lys Ser Asn Arg Ser His Leu Tyr Asn
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Thr Val Arg Leu Phe Thr Pro Cys Thr Arg His Lys Gln Ala Pro Gly
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Lys Trp Gln Asp Ile Leu Lys Glu Val Lys Phe Leu Arg Gln Leu Lys
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 <213> Homo sapiens

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 Gly Tyr Ala Val His Asp Asn Trp Ile Gly Cys Asn Val Ser Ser Tyr
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 Trp Gly Arg Thr Tyr Ser Phe Thr Ser Ala Met Ser Arg Gly Cys Val
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<211> 981

<212> PRT

<213> Homo sapiens

<400> 5918

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 Arg Thr Met Leu Phe Thr Ile Gly Gln Ser Glu Val Tyr Leu Ile Ser
 115 120 125
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<211> 1320

<212> DNA

<213> Homo sapiens

<400> 5919

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<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<210> 5922

<211> 1252

<212> PRT

<213> Homo sapiens

<400> 5922

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Thr	His	Asn	Asp	Ala	Ile	Gln	Cys	Val	Ser	Tyr	Asn	Pro	Ile	Thr	His
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Gln	Leu	Ala	Ser	Cys	Ser	Ser	Ser	Asp	Phe	Gly	Leu	Trp	Ser	Pro	Glu
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Gln	Lys	Ser	Val	Ser	Lys	His	Lys	Ser	Ser	Ser	Lys	Ile	Ile	Cys	Cys
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Pro	Glu	Glu	Glu	Asp	Asp	Ser	Pro	Arg	Asp	Asp	Asn	Leu	Glu	Glu	Arg
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Pro Cys Cys Ile Ser Tyr Phe Thr Lys Gly Glu Tyr Ile Leu Leu Gly				
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Gly Ser Asp Lys Gln Val Ser Leu Phe Thr Lys Asp Gly Val Arg Leu				
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Gly Thr Val Gly Glu Gln Asn Ser Trp Val Trp Thr Cys Gln Ala Lys				
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Pro Asp Ser Asn Tyr Val Val Val Gly Cys Gln Asp Gly Thr Ile Ser				
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Phe Tyr Gln Leu Ile Phe Ser Thr Val His Gly Leu Tyr Lys Asp Arg				
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Tyr Ala Tyr Arg Asp Ser Met Thr Asp Val Ile Val Gln His Leu Ile				
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Thr Glu Gln Lys Val Arg Ile Lys Cys Lys Glu Leu Val Lys Lys Ile				
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Lys Glu Lys Ile Ile Lys Lys Phe Glu Cys Asn Leu Leu Val Val Cys				
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5103

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 1125 1130 1135
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<210> 5923

<211> 1989

<212> DNA

<213> Homo sapiens

<400> 5923

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<211> 146

<212> PRT

<213> Homo sapiens

<400> 5924

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Asn Ile Gln Asn Ile Asp Glu Asp Glu Asp Leu Glu Val Phe Arg Asn					
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Ser Leu Tyr Ala Pro Asp Tyr Ser Ser Arg Leu Asp Ile Val Arg Ala					
85		90		95	
Asn Ser Lys Ser Pro Leu Gln Arg Ser Leu Ser Ala Lys Cys Val Ser					
100		105		110	
Gly Thr Gly Gln Val Ser Thr Cys Arg Leu Arg Lys Asp Gln Gln Ala					
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<210> 5925

<211> 4538

<212> DNA

<213> Homo sapiens

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<210> 5926

<211> 526

<212> PRT

<213> Homo sapiens

<400> 5926

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Gly	Leu	Ala	Leu	Ser	Pro	Val	Thr	Arg	Pro	Pro	Gln	Pro	Arg	Leu	Thr
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Phe	Val	His	Pro	Lys	Pro	Val	Ser	Leu	Thr	Gly	Gly	Arg	Pro	Lys	Gln
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Leu	Lys	Asn	Ala	Arg	Ile	Ala	Pro	Ala	Ala	Phe	Ser	Gly	Gln	Pro	Gln
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Ala	Val	Ile	Met	Thr	Ser	Gly	Pro	Leu	Lys	Arg	Glu	Gly	Met	Leu	Ala
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Ser	Thr	Val	Ser	Gln	Ser	Asn	Val	Val	Ile	Ala	Pro	Ala	Ala	Ile	Ala
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<211> 1786
<212> DNA
<213> Homo sapiens
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<210> 5928

<211> 202

<212> PRT

<213> Homo sapiens

<400> 5928

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Leu Asp Leu	Pro Ser Leu Thr Ser Leu Leu Ser Glu Lys Ala Lys Glu		
	35	40	45
Phe Leu Met	Glu Asn Arg Val Gln Ser Phe Tyr Gln Gln Glu Leu Glu		
	50	55	60
Met Val Glu Ser	Leu Leu Ser Leu Ala Asn Gln Pro Val Ile His Ser		
	65	70	75
Ala Cys Ser Asp	Gln Val Asn Phe Lys Lys Asp Thr Thr Ser Lys Ala		
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Ile His Ser Ile	Phe Lys Asn Ala Ile Gln Leu Leu Gln Glu Lys Gly		
	100	105	110
Leu Val Phe Gln	Lys Asp Asp Gly Phe Asp Asn Leu Tyr Tyr Val Thr		
	115	120	125
Arg Glu Asp Lys	Asp Leu His Arg Lys Ile His Arg Ile Ile Gln Gln		
	130	135	140
Asp Cys Gln Lys	Pro Asn His Met Glu Lys Gly Cys His Phe Leu His		
	145	150	155
Ile Leu Ala Cys	Ala Arg Leu Ser Ile Arg Pro Gly Leu Ser Glu Ala		
	165	170	175
Val Leu Gln Gln	Val Leu Glu Leu Leu Glu Asp Gln Ser Asp Ile Val		
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<210> 5929

<211> 606

<212> DNA

<213> Homo sapiens

<400> 5929

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606

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 35 40 45
 Leu Gln Pro Ala Gly Ser Val Ser Ser Thr Pro Leu Ser Thr Pro Cys
 50 55 60
 Ser Ser Val Pro Ser Ser Pro Ser Phe Ser Pro Thr Glu Gln Lys Thr
 65 70 75 80
 His Leu Glu Asp Leu Tyr Trp Met Ala Ser Asn Tyr Gln Gln Met Asn
 85 90 95
 Pro Glu Ala Leu Asn Leu Thr Pro Glu Asp Ala Val Glu Ala Leu Ile
 100 105 110
 Gly Ser His Pro Val Pro Gln Pro Leu Gln Ser Phe Asp Ser Phe Arg
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<210> 5931
 <211> 478
 <212> DNA
 <213> Homo sapiens

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<210> 5932
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 <212> PRT
 <213> Homo sapiens

<400> 5932

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 35 40 45
 Ala Gly Ser Ser Gly Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln
 50 55 60
 Glu Val Met Glu Glu Glu Trp Asn Ala Leu Gln Ser Val Glu Asn Cys
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<210> 5933

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 5933

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<210> 5934

<211> 314

<212> PRT

<213> Homo sapiens

<400> 5934

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			20					25				30			
Ser	Lys	Val	Arg	Glu	Gln	Leu	Glu	Gln	Glu	Leu	Glu	Glu	Leu	Thr	Ala
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Ser	Leu	Phe	Glu	Glu	Ala	His	Lys	Met	Val	Arg	Glu	Ala	Asn	Met	Lys
	50				55				60						
Gln	Ala	Ala	Ser	Glu	Lys	Gln	Leu	Lys	Glu	Ala	Arg	Gly	Lys	Ile	Asp
65				70					75					80	
Met	Leu	Gln	Ala	Glu	Val	Thr	Ala	Leu	Lys	Thr	Leu	Val	Ile	Thr	Ser
			85					90					95		
Thr	Pro	Ala	Ser	Pro	Asn	Arg	Glu	Leu	His	Pro	Gln	Leu	Leu	Ser	Pro

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Pro Asp Arg Glu Gly Lys Glu Val Asp Thr Ile Leu Phe Ala Glu Phe		
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Gln Ala Trp Arg Glu Ser Pro Thr Leu Asp Lys Thr Cys Pro Phe Leu		
165	170	175
Glu Arg Val Tyr Arg Glu Asp Val Gly Pro Cys Leu Asp Phe Thr Met		
180	185	190
Gln Glu Leu Ser Val Leu Val Arg Ala Ala Val Glu Asp Asn Thr Leu		
195	200	205
Thr Ile Glu Pro Val Ala Ser Gln Thr Leu Pro Thr Val Lys Val Ala		
210	215	220
Glu Val Asp Cys Ser Ser Thr Asn Thr Cys Ala Leu Ser Gly Leu Thr		
225	230	235
Arg Thr Cys Arg His Arg Ile Arg Leu Gly Asp Ser Lys Ser His Tyr		
245	250	255
Tyr Ile Ser Pro Ser Ser Arg Ala Arg Ile Thr Ala Val Cys Asn Phe		
260	265	270
Phe Thr Tyr Ile Arg Tyr Ile Gln Gln Gly Leu Val Arg Gln Asp Ala		
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<210> 5935

<211> 2727

<212> DNA

<213> Homo sapiens

<400> 5935

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<210> 5936

<211> 154

<212> PRT

<213> Homo sapiens

<400> 5936

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		20						25					30		
Asp	Gln	Glu	Pro	Pro	Pro	Pro	Tyr	Gln	Glu	Gln	Val	Pro	Val	Pro	Val
	35						40					45			
Tyr	His	Pro	Thr	Pro	Ser	Gln	Thr	Arg	Leu	Ala	Thr	Gln	Leu	Thr	Glu
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Glu	Glu	Gln	Ile	Arg	Ile	Ala	Gln	Arg	Ile	Gly	Leu	Ile	Gln	His	Leu
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Pro	Lys	Gly	Val	Tyr	Asp	Pro	Gly	Arg	Asp	Gly	Ser	Glu	Lys	Lys	Ile
			85					90					95		
Arg	Glu	Cys	Val	Ile	Cys	Met	Met	Asp	Phe	Val	Tyr	Gly	Asp	Pro	Ile
		100						105					110		
Arg	Phe	Leu	Pro	Cys	Met	His	Ile	Tyr	His	Leu	Asp	Cys	Ile	Asp	Asp
		115					120						125		
Trp	Leu	Met	Arg	Ser	Phe	Thr	Cys	Pro	Ser	Cys	Met	Glu	Pro	Val	Asp
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Ala	Ala	Leu	Leu	Ser	Ser	Tyr	Glu	Thr	Asn						
145						150									

<210> 5937

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 5937

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<210> 5938

<211> 406

<212> PRT

<213> Homo sapiens

<400> 5938

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 20           25           30
Gly Lys Ser Leu Ile Val Pro Phe Lys Gly Ser Arg Val Ile Asp Ser
 35           40           45
Thr Val Leu Pro Gly Ile Leu Ile Glu Met Ser Glu Val Gln Leu Met
 50           55           60
Arg Leu Leu Pro Ile Lys Lys Ser Thr Ala Leu Lys Val Ala Leu Phe
65           70           75           80
Cys Thr Thr Leu Ser Gly Asp Thr Ser Asp Thr Gly Glu Gly Thr Val
 85           90           95
Val Val Ser Tyr Gly Val Ser Leu Glu Asn Ala Val Leu Asp Gln Leu
100          105          110
Leu Asn Leu Gly Arg Gln Leu Ile Ser Asp His Val Asp Leu Val Leu
115          120          125
Cys Gln Lys Val Ile His Pro Ser Leu Lys Gln Phe Leu Asn Met His
130          135          140
Arg Ile Ile Ala Ile Asp Arg Ile Gly Val Thr Leu Met Glu Pro Leu
145          150          155          160
Thr Lys Met Thr Gly Thr Gln Pro Ile Gly Ser Leu Gly Ser Ile Cys
165          170          175
Pro Asn Ser Tyr Gly Ser Val Lys Asp Val Cys Thr Ala Lys Phe Gly
180          185          190
Ser Lys His Phe Phe His Leu Ile Pro Asn Glu Ala Thr Ile Cys Ser
195          200          205
Leu Leu Leu Cys Asn Arg Asn Asp Thr Ala Trp Asp Glu Leu Lys Leu
210          215          220
Thr Cys Gln Thr Ala Leu His Val Leu Gln Leu Thr Leu Lys Glu Pro
225          230          235          240
Trp Ala Leu Leu Gly Gly Gly Cys Thr Glu Thr His Leu Ala Ala Tyr
245          250          255
Ile Arg His Lys Thr His Asn Asp Pro Glu Ser Ile Leu Lys Asp Asp
260          265          270
Glu Cys Thr Gln Thr Glu Leu Gln Leu Ile Ala Glu Ala Phe Cys Ser
275          280          285
Ala Leu Glu Ser Val Val Gly Ser Leu Glu His Asp Gly Gly Glu Ile
290          295          300
Leu Thr Asp Met Lys Tyr Gly His Leu Trp Ser Val Gln Ala Asp Ser
305          310          315          320
Pro Cys Val Ala Asn Trp Pro Asp Leu Leu Ser Gln Cys Gly Cys Gly
325          330          335
Leu Tyr Asn Ser Gln Glu Glu Leu Asn Trp Ser Phe Leu Arg Ser Thr
340          345          350
Arg Arg Pro Phe Val Pro Gln Ser Cys Leu Pro His Glu Ala Val Gly
355          360          365
Ser Ala Ser Asn Leu Thr Leu Asp Cys Leu Thr Ala Lys Leu Ser Gly
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Leu Gln Val Ala Val Glu Thr Ala Asn Leu Ile Leu Asp Leu Ser Tyr
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Val Ile Glu Asp Lys Asn

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405

<210> 5939

<211> 795

<212> DNA

<213> Homo sapiens

<400> 5939

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180
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<210> 5940

<211> 96

<212> PRT

<213> Homo sapiens

<400> 5940

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Cys Lys Arg Lys Glu Gln Glu Gln Lys Glu Arg Ala Leu Gln Pro
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Lys Lys Gln Arg Leu Val Phe Thr Asp Leu Gln Arg Arg Thr Leu Ile
20           25           30
Ala Ile Phe Lys Glu Asn Lys Arg Pro Ser Lys Glu Met Gln Val Thr
35           40           45
Ile Ser Gln Gln Leu Gly Leu Glu Leu Asn Thr Val Ser Asn Phe Phe
50           55           60
Met Asn Ala Arg Arg Arg Cys Met Asn Arg Trp Ala Glu Glu Pro Ser
65           70           75           80
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85

90

95

<210> 5941

<211> 2590

<212> DNA

<213> Homo sapiens

<400> 5941

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<210> 5942

<211> 89

<212> PRT

<213> Homo sapiens

<400> 5942

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			20					25					30		
Pro	Gly	Ser	Leu	Gln	Pro	Pro	Pro	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys

35 40 45
 Leu Ser Leu Pro Ser Ser Trp Asp Tyr Arg Cys Leu Ser Ser Arg Leu
 50 55 60
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 Gly Trp Ser Gln Thr Pro Asp Leu Lys
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<210> 5943

<211> 781

<212> DNA

<213> Homo sapiens

<400> 5943

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 781

<210> 5944

<211> 174

<212> PRT

<213> Homo sapiens

<400> 5944

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 20 25 30
 Gly Val Ser Ser Ile Thr Lys Leu Gln Arg Gln Pro Phe Gly Val Glu

35	40	45
Thr Lys Pro Gly Ile Leu Cys Cys Phe Gln Asn Glu Phe Glu Asn Pro		
50	55	60
Cys Phe Pro Lys Ser His Phe Ser Val Thr Gln Ala Gly Glu Gln Trp		
65	70	75
Arg Asp Leu Ser Ser Pro Gln Pro Pro Pro Arg Phe Lys Gln Phe		80
85	90	95
Ser Cys Leu Ser Leu Pro Ser Ser Trp Asp His Arg His Pro Pro Pro		
100	105	110
Arg Pro Ala Asn Phe Cys Ile Phe Ser Arg Asp Glu Val Ser Pro Arg		
115	120	125
Ser Arg Ser Pro Asp Leu Met Xaa Ser Ala His Leu Gly Leu Pro Lys		
130	135	140
Cys Trp Asp Tyr Arg Arg Glu Pro Leu Arg Pro Ala Gln Ile Ser Leu		
145	150	155
Leu Phe Ser Lys Ser Pro Ser Gln Asp Ile Gln Ala Lys Ala		160
165	170	

<210> 5945

<211> 869

<212> DNA

<213> Homo sapiens

<400> 5945

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<210> 5946

<211> 121

<212> PRT

<213> Homo sapiens

<400> 5946

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 Arg Asp Phe Leu Arg Tyr Leu Gln Ser Leu Leu Ala Glu Val Glu Arg
 35 40 45
 Arg Ile Arg Arg Gly His Ala Arg Leu Ala Leu Ser Gln Asn Gln Gln
 50 55 60
 Ser Ser Gly Ala Ala Gly Pro Thr Gly Lys Asn Gly Glu Lys Ile Gln
 65 70 75 80
 Val Leu Thr Asp Lys Ile Asp Val Leu Leu Gln Gln Ile Glu Glu Leu
 85 90 95
 Gly Ser Glu Gly Lys Val Glu Glu Ala Gln Gly Met Met Lys Leu Val
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 Glu Gln Leu Lys Glu Glu Arg Glu Leu
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<210> 5947

<211> 2283

<212> DNA

<213> Homo sapiens

<400> 5947

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2280
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2283

<210> 5948
 <211> 76
 <212> PRT
 <213> Homo sapiens

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 Pro Arg Ala Ser Lys His His Tyr Ser Arg Ser Arg Ser Arg Ser Arg
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 Glu Arg Lys Arg Lys Ser Asp Asn Glu Gly Arg Lys His Arg Ser Arg
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<210> 5949
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 <212> DNA
 <213> Homo sapiens

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<210> 5950

<211> 397

<212> PRT

<213> Homo sapiens

<400> 5950

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			20					25					30		
His	Ala	Met	Lys	Gly	Val	Ile	Arg	Val	Lys	Phe	Val	Asn	Asp	Leu	Gly
		35					40					45			
Val	Asp	Glu	Ala	Gly	Ile	Asp	Gln	Asp	Gly	Val	Phe	Lys	Glu	Phe	Leu
	50					55					60				
Glu	Glu	Ile	Ile	Lys	Arg	Val	Phe	Asp	Pro	Ala	Leu	Asn	Leu	Phe	Lys
65				70					75				80		
Thr	Thr	Ser	Gly	Asp	Glu	Arg	Leu	Tyr	Pro	Ser	Pro	Thr	Ser	Tyr	Ile
			85					90					95		
His	Glu	Asn	Tyr	Leu	Gln	Leu	Phe	Glu	Phe	Val	Gly	Lys	Met	Leu	Gly
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Lys	Ala	Val	Tyr	Glu	Gly	Ile	Val	Val	Asp	Val	Pro	Phe	Ala	Ser	Phe
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Phe	Leu	Ser	Gln	Leu	Leu	Gly	His	His	His	Ser	Val	Phe	Tyr	Ser	Ser
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Val	Asp	Glu	Leu	Pro	Ser	Leu	Asp	Ser	Glu	Phe	Tyr	Lys	Asn	Leu	Thr
145				150					155				160		
Ser	Ile	Lys	Arg	Tyr	Asp	Gly	Asp	Ile	Thr	Asp	Leu	Gly	Leu	Thr	Leu
			165					170					175		
Ser	Tyr	Asp	Glu	Asp	Val	Met	Gly	Gln	Leu	Val	Cys	His	Glu	Leu	Ile
		180						185					190		
Pro	Gly	Gly	Lys	Thr	Ile	Pro	Val	Thr	Asn	Glu	Asn	Lys	Ile	Ser	Tyr
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210	215	220
Thr Ala Ala Leu Ile Ser Gly Phe Arg Ser Ile Ile Lys Pro Glu Trp		
225	230	235
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	245	250
Asn Ala Glu Ile Asp Leu Glu Asp Leu Lys Lys His Thr Val Tyr Tyr		255
	260	265
Gly Gly Phe His Gly Ser His Arg Val Ile Ile Trp Leu Trp Asp Ile		270
	275	280
Leu Ala Ser Asp Phe Thr Pro Asp Glu Arg Ala Met Phe Leu Lys Phe		285
	290	295
Val Thr Ser Cys Ser Arg Pro Pro Leu Leu Gly Phe Ala Tyr Leu Lys		300
305	310	315
Pro Pro Phe Ser Ile Arg Cys Val Glu Val Ser Asp Asp Gln Asp Thr		320
	325	330
Gly Asp Thr Leu Gly Ser Val Leu Arg Gly Phe Phe Thr Ile Arg Lys		335
	340	345
Arg Glu Pro Gly Gly Arg Leu Pro Thr Ser Ser Thr Cys Phe Asn Leu		350
	355	360
Leu Lys Leu Pro Asn Tyr Ser Lys Lys Ser Val Leu Arg Glu Lys Leu		365
	370	375
Arg Tyr Ala Ile Ser Met Asn Thr Gly Phe Glu Leu Ser		380
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<210> 5951

<211> 1724

<212> DNA

<213> Homo sapiens

<400> 5951

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<210> 5952

<211> 378

<212> PRT

<213> Homo sapiens

<400> 5952

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			20					25					30		
Ala	Pro	Arg	Phe	Pro	Pro	Gly	Gly	Phe	Ala	Ala	Gly	Arg	Thr	Met	Leu
		35				40						45			
Leu	Lys	Glu	Tyr	Arg	Ile	Cys	Met	Pro	Leu	Thr	Val	Asp	Glu	Tyr	Lys
	50					55					60				
Ile	Gly	Gln	Leu	Tyr	Met	Ile	Ser	Lys	His	Ser	His	Glu	Gln	Ser	Asp
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Arg	Gly	Glu	Gly	Val	Glu	Val	Val	Gln	Asn	Glu	Pro	Phe	Glu	Asp	Pro
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His	His	Gly	Asn	Gly	Gln	Phe	Thr	Glu	Lys	Arg	Val	Tyr	Leu	Asn	Ser

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Lys Leu Pro Ser Trp Ala Arg	Ala Val Val Pro Lys Ile Phe Tyr Val	
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Thr Glu Lys Ala Trp Asn Tyr Tyr	Pro Tyr Thr Ile Thr Glu Tyr Thr	
130	135	140
Cys Ser Phe Leu Pro Lys Phe Ser Ile His Ile	Glu Thr Lys Tyr Glu	
145	150	155
Asp Asn Lys Gly Ser Asn Asp Thr Ile Phe Asp Asn	Glu Ala Lys Asp	
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Val Glu Arg Glu Val Cys Phe Ile Asp Ile Ala Cys Asp	Glu Ile Pro	
180	185	190
Glu Arg Tyr Tyr Lys Glu Ser Glu Asp Pro Lys His Phe	Lys Ser Glu	
195	200	205
Lys Thr Gly Arg Gly Gln Leu Arg Glu Gly Trp Arg Asp	Ser His Gln	
210	215	220
Pro Ile Met Cys Ser Tyr Lys Leu Val Thr Val Lys Phe	Glu Val Trp	
225	230	235
Gly Leu Gln Thr Arg Val Glu Gln Phe Val His Lys Val	Val Arg Asp	
245	250	255
Ile Leu Leu Ile Gly His Arg Gln Ala Phe Ala Trp Val	Asp Glu Trp	
260	265	270
Tyr Asp Met Thr Met Asp Glu Val Arg Glu Phe Glu Arg	Ala Thr Gln	
275	280	285
Glu Ala Thr Asn Lys Lys Ile Gly Ile Phe Pro Pro Ala	Ile Ser Ile	
290	295	300
Ser Ser Ile Pro Leu Leu Pro Ser Ser Val Arg Ser Ala	Pro Ser Ser	
305	310	315
Ala Pro Ser Thr Pro Leu Ser Thr Asp Ala Pro Glu Phe	Leu Ser Val	
325	330	335
Pro Lys Asp Arg Pro Arg Lys Lys Ser Ala Pro Glu Thr	Leu Thr Leu	
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<210> 5953

<211> 777

<212> DNA

<213> Homo sapiens

<400> 5953

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360

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<210> 5954

<211> 152

<212> PRT

<213> Homo sapiens

<400> 5954

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Tyr	Lys	Leu	Val	Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg
			20					25					30		
Cys	Leu	Glu	Arg	Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr
		35					40					45			
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Val	Gln	Glu	Val	Met	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	
65				70				75					80		
Asn	Cys	Pro	Glu	Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala
			85					90					95		
Val	Leu	Glu	Glu	Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile
			100					105					110		
Ile	Ser	Glu	Tyr	Glu	Lys	Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser
		115					120					125			
Ile	Met	Leu	Ala	Glu	Trp	Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys
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Thr	Lys	Pro	Val	Ile	Leu	Gly	Leu								
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<210> 5955

<211> 1459

<212> DNA

<213> Homo sapiens

<400> 5955

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<210> 5956

<211> 431

<212> PRT

<213> Homo sapiens

<400> 5956

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Arg Phe Lys Ala Leu Pro Pro Gly Ala Gln Pro Val Ile Cys Ile His
  35      40      45
Ser Ala Cys Thr Trp Ala Asp Asp Leu Ser Val Cys Tyr Pro Ser Pro
  50      55      60
His Ile Thr Ile His Met His Gly Gly Thr Ser Ser Asp Gly Ser Ser
  65      70      75      80
Ser Met Ala Ala Ile Tyr Gly Gly Val Glu Gly Gly Gly Thr Arg Ser
      85      90      95
Glu Val Leu Leu Val Ser Glu Asp Gly Lys Ile Leu Ala Glu Ala Asp
      100      105      110
Gly Leu Ser Thr Asn His Trp Leu Ile Gly Thr Asp Lys Cys Val Glu
      115      120      125
Arg Ile Asn Glu Met Val Asn Arg Ala Lys Arg Lys Ala Gly Val Asp
      130      135      140
Pro Leu Val Pro Leu Arg Ser Leu Gly Leu Ser Leu Ser Gly Gly Asp
      145      150      155      160
Gln Glu Asp Ala Gly Arg Ile Leu Ile Glu Glu Leu Arg Asp Arg Phe
      165      170      175
Pro Tyr Leu Ser Glu Ser Tyr Leu Ile Thr Thr Asp Ala Ala Gly Ser
      180      185      190
Ile Ala Thr Ala Thr Pro Asp Gly Gly Val Val Leu Ile Ser Gly Thr
      195      200      205
Gly Ser Asn Cys Arg Leu Ile Asn Pro Asp Gly Ser Glu Ser Gly Cys
      210      215      220
Gly Gly Trp Gly His Met Met Gly Asp Glu Gly Ser Ala Leu Ser Ala
      225      230      235      240
Pro Ser Ala Tyr Trp Ile Ala His Gln Ala Val Lys Ile Val Phe Asp
      245      250      255
Ser Ile Asp Asn Leu Glu Ala Ala Pro His Asp Ile Gly Tyr Val Lys
      260      265      270
Gln Ala Met Phe His Tyr Phe Gln Val Pro Asp Arg Leu Gly Ile Leu
      275      280      285
Thr His Leu Tyr Arg Asp Phe Asp Lys Cys Arg Phe Ala Gly Phe Cys
      290      295      300
Arg Lys Ile Ala Glu Gly Ala Gln Gln Gly Asp Pro Leu Ser Arg Tyr
      305      310      315      320
Ile Phe Arg Lys Ala Gly Glu Met Leu Gly Arg His Ile Val Ala Val
      325      330      335
Leu Pro Glu Ile Asp Pro Val Leu Phe Gln Gly Lys Ile Gly Leu Pro
      340      345      350
Ile Leu Cys Val Gly Ser Val Trp Lys Ser Trp Glu Leu Leu Lys Glu
      355      360      365
Gly Phe Leu Leu Ala Leu Thr Gln Gly Arg Glu Ile Gln Ala Gln Asn
      370      375      380
Phe Phe Ser Ser Phe Thr Leu Met Lys Leu Arg His Ser Ser Ala Leu
      385      390      395      400
Gly Gly Ala Ser Leu Gly Ala Arg His Ile Gly His Leu Leu Pro Met
      405      410      415
Asp Tyr Ser Ala Asn Ala Ile Ala Phe Tyr Ser Tyr Thr Phe Ser
      420      425      430

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<210> 5957

<211> 855

<212> DNA

<213> Homo sapiens

<400> 5957

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 120
 ctaaacaggc accgccaggc tggaaagcagt gggccaggga attctcagaa cagctttcta
 180
 gttcaagagg tgatggaaga agagtggaat gctttgcagt cagtggagaa ttgtccagaa
 240
 gacttggtc agctggagga gctgatagac atggctgtgc tggaggaaat tcaacaggag
 300
 ctgatcaacc aaggcctgtg atacttgggc tgtgatcctc tagagccagc ttggactcac
 360
 atcattctat ggggttgaag acaactcatt ccctctgagg agccttgtac atacaagcct
 420
 tttatttata acttattttg tattgaaact tttaacaat actgaagaaa aaaaaacttt
 480
 tccgacatct gttcttggtc ttttgtgaca caggttgaag ggggaggaat agaaaaagac
 540
 aaactgcctt ggaggagata aaccaatttt atgtctatca tgttatacaa aaatctagaa
 600
 ataataagatt tgtacagaaa aaaatgataa taaatgagag cacaaaacat ataatttaaa
 660
 tctggtattt tttcccccatt gatattagga tgataatcat ttcaaagcac atgtctagct
 720
 tcagagtagg atttgttcac tggccaaagc ctgcatgaa actatggctt tcagcatctg
 780
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 840
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 855

<210> 5958

<211> 106

<212> PRT

<213> Homo sapiens

<400> 5958

Met	Ala	Glu	Ser	Leu	Arg	Ser	Pro	Arg	Arg	Ser	Leu	Tyr	Lys	Leu	Val
1				5					10					15	
Gly	Ser	Pro	Pro	Trp	Lys	Glu	Ala	Phe	Arg	Gln	Arg	Cys	Leu	Glu	Arg
			20					25					30		
Met	Arg	Asn	Ser	Arg	Asp	Arg	Leu	Leu	Asn	Arg	Tyr	Arg	Gln	Ala	Gly
		35					40				45				
Ser	Ser	Gly	Pro	Gly	Asn	Ser	Gln	Asn	Ser	Phe	Leu	Val	Gln	Glu	Val
		50				55				60					
Met	Glu	Glu	Glu	Trp	Asn	Ala	Leu	Gln	Ser	Val	Glu	Asn	Cys	Pro	Glu
65					70				75					80	
Asp	Leu	Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu
			85					90					95		
Ile	Gln	Gln	Glu	Leu	Ile	Asn	Gln	Gly	Leu						

100

105

<210> 5959

<211> 830

<212> DNA

<213> Homo sapiens

<400> 5959

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120
ctatatgatg acaatctctt ctgtcatttg gtggatgaag tactcttggg tgaaagggag
180
ctacacagtg ttcatggcta tcctggcact tttgctaatt gtatgcatat tctatcagag
240
gaaacctgtt ttcaaagatg ggtgacgggg gagagaaaat ttgctcttca aaaaatggag
300
tcaatgcttt cctcagaagc tgcctgggta tcgcaatata aggatattcac tgacgtggat
360
gaaatgaaag ttccagattg tgcagaaact tttatgactc tactcttggg tataactgac
420
aggtataaaa atcttccac agcttccga aagcttcagt tcctggagtt acagaaggag
480
ttagtagatg attttaggat acgattaaca caagtgatga aagaagagac tagagcttcc
540
cttggttttc gatactgtgc aattcttaat gctgtgaact acatctcaac agtactagca
600
gattgggctg acaatgtttt ctttctacaa ctccaacagg ctgcactgga ggtgtttgca
660
gagaataata ctctgagtaa attgcagcta ggacagctag cctctatgga gagctctgtc
720
tttgatgaca tgattaacct cttagaacgt ttaaagcatg atatgttgac ccgtcaagta
780
gaccacgttt ttagagaagt taaagatgct gcaaaattgt ataaaaaaga
830

<210> 5960

<211> 251

<212> PRT

<213> Homo sapiens

<400> 5960

Met	Met	Leu	Val	Leu	Glu	Lys	Leu	Ala	Thr	Asp	Ile	Pro	Cys	Leu	Leu
1				5					10					15	
Tyr	Asp	Asp	Asn	Leu	Phe	Cys	His	Leu	Val	Asp	Glu	Val	Leu	Leu	Phe
			20					25					30		
Glu	Arg	Glu	Leu	His	Ser	Val	His	Gly	Tyr	Pro	Gly	Thr	Phe	Ala	Asn
		35					40					45			
Cys	Met	His	Ile	Leu	Ser	Glu	Thr	Cys	Phe	Gln	Arg	Trp	Val	Thr	
	50					55				60					
Gly	Glu	Arg	Lys	Phe	Ala	Leu	Gln	Lys	Met	Asp	Ser	Met	Leu	Ser	Ser
65					70					75				80	
Glu	Ala	Ala	Trp	Val	Ser	Gln	Tyr	Lys	Asp	Ile	Thr	Asp	Val	Asp	Glu

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<210> 5961
<211> 585
<212> DNA
<213> Homo sapiens
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<210> 5962
<211> 114
<212> PRT
<213> Homo sapiens
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<400> 5962

Met Cys Gly Asp Met Gln Glu Gly Thr Pro Arg Cys Ala Tyr Thr Ala
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 Leu Leu Pro Pro Gly Pro Thr Leu His Arg Asp Thr Arg Arg Glu Ser
 20 25 30
 Leu Ser His Ser His Gln Pro Gly Leu Ser Gly Glu Gly Ala Gln Glu
 35 40 45
 Gln Ala Arg Ile Asp Thr Gly Ile His Met Lys Arg Met Gln Thr Pro
 50 55 60
 Arg His Pro Ala Leu Ser Gln Ser Leu Ile Lys Phe Gly Ile Leu Phe
 65 70 75 80
 Asp Pro Ser Ile Phe Phe Leu Glu Thr Gly Ser Arg Phe Ile Ala Gln
 85 90 95
 Ala Glu Cys Ser Gly Tyr Ser Gln Ala Pro Leu Glu Arg Thr Ala Ala
 100 105 110
 Pro Ser

<210> 5963

<211> 1288

<212> DNA

<213> Homo sapiens

<400> 5963

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 120
 gaagaaaaag tgaaacgatc tgtgaaagat gctgccaaga agggccagaa ggatgtctgc
 180
 atagtctctgg ccaaggagat gatcagggtca aggaaggctg tgagcaagct gtatgcatcc
 240
 aaagcacaca tgaactcagt gctcatgggg atgaagaacc agctcgcggt cttgcgagtg
 300
 gctgggtccc tgcagaagag cacagaagtg atgaaggcca tgcaaagtct tgtgaagatt
 360
 ccagagattc aggccaccat gagggagttg tccaaagaaa tgatgaaggc tgggatcata
 420
 gaggagatgt tagaggacac ttttgaaagc atggacgatc aggaagaaat ggaggaagaa
 480
 gcagaaatgg aaattgacag aattctcttt gaaattacag caggggcctt gggcaaagca
 540
 cccagtaaag tgactgatgc cttccagag ccagaacctc caggagcgat ggctgcctca
 600
 gaggatgagg aggaggagga agaggctctg gaggccatgc agtcccggtt ggccacactc
 660
 cgcagctagg ggctgcctac cccgctgggt gtgcacacac tcctctcaag agctgccatt
 720
 ttatgtgtct cttgcactac acctctgttg tgaggactac cattttggag aaggttctgt
 780
 ttgtctcttt tcattctctg cccaggtttt gggatcgcaa agggattgtt cttataaaa
 840
 tggcataaat aaatgcacat ttttaggag tatagacaga tatatcttat tgtggggagg
 900

ggaaagaaat ccattctgctc atgaagcact tctgaaaata taggtgattg cctgaatgtc
 960
 gaagactcta cttttgtcta taaaacacta tataaatgaa ttttaataaa tttttgcttc
 1020
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 1080
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 1140
 agctcagcag aagtgacttc tgctctgtgg ttgctgctcc ccggctttca cagacatggg
 1200
 atggcagcca ttcttttatc tatttaacca agaggatgct gggaattgt gctgcttctc
 1260
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 1288

<210> 5964

<211> 222

<212> PRT

<213> Homo sapiens

<400> 5964

Met	Gly	Leu	Phe	Gly	Lys	Thr	Gln	Glu	Lys	Pro	Pro	Lys	Glu	Leu	Val
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Asn	Glu	Trp	Ser	Leu	Lys	Ile	Arg	Lys	Glu	Met	Arg	Val	Val	Asp	Arg
			20					25					30		
Gln	Ile	Arg	Asp	Ile	Gln	Arg	Glu	Glu	Glu	Lys	Val	Lys	Arg	Ser	Val
		35				40					45				
Lys	Asp	Ala	Ala	Lys	Lys	Gly	Gln	Lys	Asp	Val	Cys	Ile	Val	Leu	Ala
	50					55					60				
Lys	Glu	Met	Ile	Arg	Ser	Arg	Lys	Ala	Val	Ser	Lys	Leu	Tyr	Ala	Ser
65				70					75					80	
Lys	Ala	His	Met	Asn	Ser	Val	Leu	Met	Gly	Met	Lys	Asn	Gln	Leu	Ala
			85						90					95	
Val	Leu	Arg	Val	Ala	Gly	Ser	Leu	Gln	Lys	Ser	Thr	Glu	Val	Met	Lys
			100					105					110		
Ala	Met	Gln	Ser	Leu	Val	Lys	Ile	Pro	Glu	Ile	Gln	Ala	Thr	Met	Arg
		115				120						125			
Glu	Leu	Ser	Lys	Glu	Met	Met	Lys	Ala	Gly	Ile	Ile	Glu	Glu	Met	Leu
	130					135						140			
Glu	Asp	Thr	Phe	Glu	Ser	Met	Asp	Asp	Gln	Glu	Glu	Met	Glu	Glu	Glu
145				150					155					160	
Ala	Glu	Met	Glu	Ile	Asp	Arg	Ile	Leu	Phe	Glu	Ile	Thr	Ala	Gly	Ala
			165					170						175	
Leu	Gly	Lys	Ala	Pro	Ser	Lys	Val	Thr	Asp	Ala	Leu	Pro	Glu	Pro	Glu
		180					185						190		
Pro	Pro	Gly	Ala	Met	Ala	Ala	Ser	Glu	Asp	Glu	Glu	Glu	Glu	Glu	Glu
		195				200						205			
Ala	Leu	Glu	Ala	Met	Gln	Ser	Arg	Leu	Ala	Thr	Leu	Arg	Ser		
	210					215						220			

<210> 5965

<211> 1011

<212> DNA

<213> Homo sapiens

<400> 5965

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 120
 agatgcctgg agagaatgag aaacagccgg gacaggctcc taaacaggta ccgccaggct
 180
 ggaagcagtg ggccagggaa ttctcagaac agctttctag ttcaagaggt gatggaagaa
 240
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 300
 gagctgatag acatggctgt gctggaggaa attcaacagg agctgatcaa ccaagagcag
 360
 tccatcatca gcgagtatga gaagagcttg cagtttgatg aaaagtgtct cagcatcatg
 420
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 480
 atcacaagcg gtgtgggtgt gtgtcagtg ggctgtcca tcccatctca ttcttctgag
 540
 ttgacagagc agaagcttcg tgcctgttta gagggtagta taaatgagca cagtgcacat
 600
 tgtccccaca cacctgaatt ttcagtcact ggaggaacag aagaaaagtc cagtcttctc
 660
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 720
 tcattctatg gggttgaaga caactcatc cctctgagga gccttgta tacaagcctt
 780
 ttatttataa cttattttgt attgaaactt ttaaacaata ctgaagaaaa aaaaactttt
 840
 ccgacatctg ttcttggctt tttgtgacgc aggttgaagg gggaggaata gaaaaagaca
 900
 aactgccttg gaggagataa accaatttta tgtctatcat gttatacaaa aatctagaaa
 960
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 1011

<210> 5966

<211> 233

<212> PRT

<213> Homo sapiens

<400> 5966

Gly Asn Gly Ser Cys Gly Phe Val Ser Arg Glu Glu Glu Met Ala Glu
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 Ser Leu Arg Ser Pro Arg Arg Ser Leu Tyr Lys Leu Val Gly Ser Pro
 20 25 30
 Pro Trp Lys Glu Ala Phe Arg Gln Arg Cys Leu Glu Arg Met Arg Asn
 35 40 45
 Ser Arg Asp Arg Leu Leu Asn Arg Tyr Arg Gln Ala Gly Ser Ser Gly
 50 55 60
 Pro Gly Asn Ser Gln Asn Ser Phe Leu Val Gln Glu Val Met Glu Glu
 65 70 75 80
 Glu Trp Asn Ala Leu Gln Xaa Gln Trp Xaa Asn Cys Pro Glu Asp Leu

	85		90		95										
Ala	Gln	Leu	Glu	Glu	Leu	Ile	Asp	Met	Ala	Val	Leu	Glu	Glu	Ile	Gln
	100						105					110			
Gln	Glu	Leu	Ile	Asn	Gln	Glu	Gln	Ser	Ile	Ile	Ser	Glu	Tyr	Glu	Lys
	115						120					125			
Ser	Leu	Gln	Phe	Asp	Glu	Lys	Cys	Leu	Ser	Ile	Met	Leu	Ala	Glu	Trp
	130						135				140				
Glu	Ala	Asn	Pro	Leu	Ile	Cys	Pro	Val	Cys	Thr	Lys	Tyr	Asn	Leu	Arg
	145					150					155				160
Ile	Thr	Ser	Gly	Val	Val	Val	Cys	Gln	Cys	Gly	Leu	Ser	Ile	Pro	Ser
			165						170				175		
His	Ser	Ser	Glu	Leu	Thr	Glu	Gln	Lys	Leu	Arg	Ala	Cys	Leu	Glu	Gly
			180					185					190		
Ser	Ile	Asn	Glu	His	Ser	Ala	His	Cys	Pro	His	Thr	Pro	Glu	Phe	Ser
		195					200					205			
Val	Thr	Gly	Gly	Thr	Glu	Glu	Lys	Ser	Ser	Leu	Leu	Met	Ser	Cys	Leu
	210					215					220				
Ala	Cys	Asp	Thr	Trp	Ala	Val	Ile	Leu							
225					230										

<210> 5967

<211> 1806

<212> DNA

<213> Homo sapiens

<400> 5967

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120
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180
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240
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300
acttcctcac taatatcagg gcttattttg atatttgaat ggtgggtattt tcgcaaatac
360
ggaacttcat tcattgaaca agtctcagta agccacttgc gcccccttct gggagggggt
420
gacaacaact cttccaacaa ttctaattcc agtaacgggg actcagattc caataggcaa
480
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540
aatcggtata cttgggtgac aggacgagag cctcttactt actatgacat gaatctctct
600
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660
ataatgcaga aagcctggag agagagaaac cccaagcta ggatttctgc agtcatgaa
720
gccttgagaa taaatgagac gagacaccaa tgtcttggtg tacatcaaaa gaaggctagc
780
aatgtgtgcc agaagactcg ggaggaccag ggaagcaaag cccttctgga actacaagca
840

tatgctgatg ttcaggcagt cttagcaaag tatgatgata taagcttacc aaagtcagca
 900
 acaatatgct acacagctgc tttgctcaaa gcaagagctg tctctgacaa attctctcct
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 1020
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 1080
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 1140
 catcttgacac actggaagag agtgggaagg gctttgaatc ttttgattg tacgtgggaa
 1200
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 1260
 atctgtacag aaacagcaga ccgagagctg cttccatctt tccatgaagt ctcagtttcc
 1320
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 1500
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 1560
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 1620
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 1680
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<210> 5968

<211> 434

<212> PRT

<213> Homo sapiens

<400> 5968

Met	Asp	Phe	Asn	Gly	Val	Gln	Phe	Val	Cys	Arg	Asn	Leu	Leu	Lys	Val
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Ser	Met	Phe	Leu	Asn	Thr	Leu	Thr	Pro	Lys	Phe	Tyr	Val	Ala	Leu	Thr
			20					25					30		
Gly	Thr	Ser	Ser	Leu	Ile	Ser	Gly	Leu	Ile	Leu	Ile	Phe	Glu	Trp	Trp
			35				40					45			
Tyr	Phe	Arg	Lys	Tyr	Gly	Thr	Ser	Phe	Ile	Glu	Gln	Val	Ser	Val	Ser
			50				55				60				
His	Leu	Arg	Pro	Leu	Leu	Gly	Gly	Val	Asp	Asn	Asn	Ser	Ser	Asn	Asn
65					70				75					80	
Ser	Asn	Ser	Ser	Asn	Gly	Asp	Ser	Asp	Ser	Asn	Arg	Gln	Ser	Val	Ser
				85					90					95	
Glu	Cys	Lys	Val	Trp	Arg	Asn	Pro	Leu	Asn	Leu	Phe	Arg	Gly	Ala	Glu

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      100      105      110
Tyr Asn Arg Tyr Thr Trp Val Thr Gly Arg Glu Pro Leu Thr Tyr Tyr
      115      120      125
Asp Met Asn Leu Ser Ala Gln Asp His Gln Thr Phe Phe Thr Cys Asp
      130      135      140
Ser Asp His Leu Arg Pro Ala Asp Ala Ile Met Gln Lys Ala Trp Arg
      145      150      155      160
Glu Arg Asn Pro Gln Ala Arg Ile Ser Ala Ala His Glu Ala Leu Glu
      165      170      175
Ile Asn Glu Thr Arg His Gln Cys Leu Gly Val His Gln Lys Lys Ala
      180      185      190
Ser Asn Val Cys Gln Lys Thr Arg Glu Asp Gln Gly Ser Lys Ala Leu
      195      200      205
Leu Glu Leu Gln Ala Tyr Ala Asp Val Gln Ala Val Leu Ala Lys Tyr
      210      215      220
Asp Asp Ile Ser Leu Pro Lys Ser Ala Thr Ile Cys Tyr Thr Ala Ala
      225      230      235      240
Leu Leu Lys Ala Arg Ala Val Ser Asp Lys Phe Ser Pro Glu Ala Ala
      245      250      255
Ser Arg Arg Gly Leu Ser Thr Ala Glu Met Asn Ala Val Glu Ala Ile
      260      265      270
His Arg Ala Val Glu Phe Asn Pro His Val Pro Lys Tyr Leu Leu Glu
      275      280      285
Met Lys Ser Leu Ile Leu Pro Pro Glu His Ile Leu Lys Arg Gly Asp
      290      295      300
Ser Glu Ala Ile Ala Tyr Ala Phe Phe His Leu Ala His Trp Lys Arg
      305      310      315      320
Val Glu Gly Ala Leu Asn Leu Leu His Cys Thr Trp Glu Gly Thr Phe
      325      330      335
Arg Met Ile Pro Tyr Pro Leu Glu Lys Gly His Leu Phe Tyr Pro Tyr
      340      345      350
Pro Ile Cys Thr Glu Thr Ala Asp Arg Glu Leu Leu Pro Ser Phe His
      355      360      365
Glu Val Ser Val Tyr Pro Lys Lys Glu Leu Pro Phe Phe Ile Leu Phe
      370      375      380
Thr Ala Gly Leu Cys Ser Phe Thr Ala Met Leu Ala Leu Leu Thr His
      385      390      395      400
Gln Phe Pro Glu Leu Met Gly Val Phe Ala Lys Ala Val Ser Val Cys
      405      410      415
Leu Glu Gly Gly Leu Gly Glu Trp Met Gly Lys Ala Lys Gly Ile Lys
      420      425      430
Ala Ala

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<210> 5969

<211> 429

<212> DNA

<213> Homo sapiens

<400> 5969

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60

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120

attgagaaga tcttgagcga ggacccccgg tggcaagatg ccaacttcgt gctgggcagc
 180
 tacaagacgg agcagtgtcc gaagccgcca cgctgtgtcc gccagggtta tgcgtgcccc
 240
 cactaccaca atagccggga caggcggcgc aacccccggc ggttccagta cagggtccacg
 300
 ccctgccccca gcgtgaagca cggggatgag tggggggaac cctcacgctg cgatggcggc
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<210> 5970

<211> 143

<212> PRT

<213> Homo sapiens

<400> 5970

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Gln	Asn	Gly	Gln	Leu	Gly	Gly	Gly	Glu	Gly	Val	Pro	Asp	Leu	Gln	Pro
			20					25					30		
Gly	Val	Leu	Ala	Ser	Gln	Ala	Met	Ile	Glu	Lys	Ile	Leu	Ser	Glu	Asp
		35					40					45			
Pro	Arg	Trp	Gln	Asp	Ala	Asn	Phe	Val	Leu	Gly	Ser	Tyr	Lys	Thr	Glu
	50					55					60				
Gln	Cys	Pro	Lys	Pro	Pro	Arg	Leu	Cys	Arg	Gln	Gly	Tyr	Ala	Cys	Pro
65				70					75					80	
His	Tyr	His	Asn	Ser	Arg	Asp	Arg	Arg	Arg	Asn	Pro	Arg	Arg	Phe	Gln
			85					90						95	
Tyr	Arg	Ser	Thr	Pro	Cys	Pro	Ser	Val	Lys	His	Gly	Asp	Glu	Trp	Gly
			100					105					110		
Glu	Pro	Ser	Arg	Cys	Asp	Gly	Gly	Asp	Gly	Cys	Gln	Tyr	Cys	His	Ser
		115				120						125			
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<210> 5971

<211> 565

<212> DNA

<213> Homo sapiens

<400> 5971

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 120
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 180
 tagatgggtca tccccatttt agagatagct cccttttata tccccatttt acagggtgaag
 240
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 300

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 360
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 420
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 480
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 565

<210> 5972

<211> 104

<212> PRT

<213> Homo sapiens

<400> 5972

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Cys	Pro	Asn	Arg	Gln	His	Pro	Tyr	Phe	Ile	Asp	Gly	His	Pro	His	Phe
			20					25				30			
Arg	Asp	Ser	Ser	Leu	Leu	Tyr	Pro	His	Phe	Thr	Gly	Glu	Gly	Ile	Glu
		35					40					45			
Ala	Gln	Lys	Val	Arg	Ser	Leu	Leu	Gln	Asp	Asp	Gln	Leu	Asn	Gln	Asn
		50				55					60				
Phe	Arg	Ala	Ser	Asn	Thr	Lys	Cys	Val	Pro	Leu	Ser	Ser	Val	Ser	His
65					70					75				80	
Leu	Leu	Pro	Arg	Gly	Ser	Ala	Ser	Ser	Leu	Trp	Pro	Leu	Ser	Ile	Leu
			85						90					95	
Pro	Pro	Thr	Leu	Leu	Pro	Ala	Ser								
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<210> 5973

<211> 797

<212> DNA

<213> Homo sapiens

<400> 5973

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 120
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 180
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 300
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 360
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<210> 5974

<211> 107

<212> PRT

<213> Homo sapiens

<400> 5974

Met	Glu	Gly	Ser	Gly	Thr	Gly	Lys	Arg	Arg	Gly	Lys	Ala	Ala	Lys	Thr
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Ser	Leu	Arg	Ile	Met	Asp	Ala	Arg	Ala	Gln	Leu	Leu	Leu	Arg	Val	Pro
			20				25						30		
His	Pro	Gly	Pro	Ser	Leu	Thr	Ser	Gly	Ala	Leu	Thr	His	Ile	Arg	Asp
		35				40					45				
Pro	His	Pro	Gly	Leu	Ser	Pro	Thr	Ser	Gly	Thr	Leu	Met	Pro	Gly	Arg
	50				55					60					
Arg	Arg	Gly	Gly	Pro	Ser	Phe	Gly	Thr	Pro	Ala	Leu	Arg	Arg	Arg	Lys
65				70					75					80	
Cys	His	Arg	Glu	Ala	Pro	Ala	Ser	Gly	Leu	Ser	Thr	Ala	Ala	Arg	Glu
			85					90						95	
Arg	Leu	Trp	Trp	Pro	Arg	Ala	Arg	Val	Cys	Arg					
			100					105							

<210> 5975

<211> 2175

<212> DNA

<213> Homo sapiens

<400> 5975

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 120
 cagagggcca cgtacaagta tgatgatgatt aacaagcaga atgagcagat gcatgcgctg
 180
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 240
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 300
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 360
 aagcaggacc ttgcttatga acgtcagtat gaacagcaaa cctatcagggt gatccctgag
 420

gtgatcaaaa actteatcca gtatttccac aaaactgtct cagatttgat tgaccagaaa
480
gtgtatgagc tacaggccag tcgtgtctcc agtgatgtca ttgaccagaa ggtgtatgag
540
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600
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660
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720
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780
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1260
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<210> 5976

<211> 564

<212> PRT

<213> Homo sapiens

<400> 5976

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Tyr	Ala	Tyr	Pro	Ser	Asp	Tyr	Asp	Met	His	Thr	Gly	Asp	Pro	Lys	Gln
			20					25					30		
Asp	Leu	Ala	Tyr	Glu	Arg	Gln	Tyr	Glu	Gln	Gln	Thr	Tyr	Gln	Val	Ile
		35					40					45			
Pro	Glu	Val	Ile	Lys	Asn	Phe	Ile	Gln	Tyr	Phe	His	Lys	Thr	Val	Ser
	50					55					60				
Asp	Leu	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Leu	Gln	Ala	Ser	Arg	Val	Ser
65					70					75				80	
Ser	Asp	Val	Ile	Asp	Gln	Lys	Val	Tyr	Glu	Ile	Gln	Asp	Ile	Tyr	Glu
			85					90					95		
Asn	Ser	Trp	Thr	Lys	Leu	Thr	Glu	Arg	Phe	Phe	Lys	Asn	Thr	Pro	Trp
			100					105					110		
Pro	Glu	Ala	Glu	Ala	Ile	Ala	Pro	Gln	Val	Gly	Asn	Asp	Ala	Val	Phe
		115					120					125			
Leu	Ile	Leu	Tyr	Lys	Glu	Leu	Tyr	Tyr	Arg	His	Ile	Tyr	Ala	Lys	Val
	130					135					140				
Ser	Gly	Gly	Pro	Ser	Leu	Glu	Gln	Arg	Phe	Glu	Ser	Tyr	Tyr	Asn	Tyr
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Cys	Asn	Leu	Phe	Asn	Tyr	Ile	Leu	Asn	Ala	Asp	Gly	Pro	Ala	Pro	Leu
			165						170					175	
Glu	Leu	Pro	Asn	Gln	Trp	Leu	Trp	Asp	Ile	Ile	Asp	Glu	Phe	Ile	Tyr
			180					185					190		
Gln	Phe	Gln	Ser	Phe	Ser	Gln	Tyr	Arg	Cys	Lys	Thr	Ala	Lys	Lys	Ser
		195					200					205			
Glu	Glu	Glu	Ile	Asp	Phe	Leu	Arg	Ser	Asn	Pro	Lys	Ile	Trp	Asn	Val
	210					215						220			
His	Ser	Val	Leu	Asn	Val	Leu	His	Ser	Leu	Val	Asp	Lys	Ser	Asn	Ile
225				230						235				240	
Asn	Arg	Gln	Leu	Glu	Val	Tyr	Thr	Ser	Gly	Gly	Asp	Pro	Glu	Ser	Val
			245						250				255		
Ala	Gly	Glu	Tyr	Gly	Arg	His	Ser	Leu	Tyr	Lys	Met	Leu	Gly	Tyr	Phe
		260					265						270		
Ser	Leu	Val	Gly	Leu	Leu	Arg	Leu	His	Ser	Leu	Leu	Gly	Asp	Tyr	Tyr
	275					280						285			
Gln	Ala	Ile	Lys	Val	Leu	Glu	Asn	Ile	Glu	Leu	Asn	Lys	Lys	Ser	Met
	290				295						300				
Tyr	Ser	Arg	Val	Pro	Glu	Cys	Gln	Val	Thr	Thr	Tyr	Tyr	Tyr	Val	Gly
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Phe	Ala	Tyr	Leu	Met	Met	Arg	Arg	Tyr	Gln	Asp	Ala	Ile	Arg	Val	Phe

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<210> 5977
<211> 2320
<212> DNA
<213> Homo sapiens
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180
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240
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300
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360
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420
tcaaaaaaca cgttaaattt aagcagaata aggctgggtt cggtgggtca tgctgtgat
480

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cccagcactt tgggaggcag aggtgggcag atcattnagg ccaggagttc gagaccagcc
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<210> 5978

<211> 77

<212> PRT

<213> Homo sapiens

<400> 5978

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		20						25					30		
Gly	Arg	Gly	Gly	Gln	Ile	Ile	Xaa	Ala	Arg	Ser	Ser	Arg	Pro	Ala	Trp
		35					40					45			
Thr	Thr	Trp	Arg	Xaa	Val	Phe	Thr	Lys	Asn	Thr	Lys	Ile	Ser	Trp	Ala
	50					55					60				
Trp	Trp	Tyr	Thr	Pro	Val	Ile	Pro	Ala	Thr	Gln	Glu	Ala			
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<210> 5979

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 5979

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<210> 5980

<211> 169

<212> PRT

<213> Homo sapiens

<400> 5980

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		20					25					30			
Ser	Gly	Gln	Glu	Asp	Tyr	Asp	Arg	Leu	Arg	Pro	Leu	Ser	Tyr	Gln	Asn
		35				40					45				
Thr	His	Leu	Val	Leu	Ile	Cys	Tyr	Asp	Val	Met	Asn	Pro	Thr	Ser	Tyr
	50					55				60					
Asp	Asn	Val	Leu	Ile	Lys	Trp	Phe	Pro	Glu	Val	Thr	His	Phe	Cys	Arg
65					70				75					80	
Gly	Ile	Pro	Met	Val	Leu	Ile	Gly	Cys	Lys	Thr	Asp	Leu	Arg	Lys	Asp
			85					90					95		
Lys	Glu	Gln	Leu	Arg	Lys	Leu	Arg	Ala	Gln	Leu	Glu	Pro	Ile	Thr	
		100					105					110			
Tyr	Met	Gln	Gly	Leu	Ser	Ala	Cys	Glu	Gln	Ile	Arg	Ala	Ala	Leu	Tyr
	115						120				125				
Leu	Glu	Cys	Ser	Ala	Lys	Phe	Arg	Glu	Asn	Val	Glu	Asp	Val	Phe	Arg
	130					135					140				
Glu	Ala	Ala	Lys	Val	Ala	Leu	Ser	Ala	Leu	Lys	Lys	Ala	Gln	Arg	Gln
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Lys	Lys	Arg	Arg	Leu	Cys	Leu	Leu	Leu							
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<210> 5981

<211> 677

<212> DNA

<213> Homo sapiens

<400> 5981

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 240
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 420
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<210> 5982

<211> 98

<212> PRT

<213> Homo sapiens

<400> 5982

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			20					25					30		
Pro	Arg	Ala	Pro	Leu	Pro	Arg	Ser	Ser	Ala	Arg	Arg	Pro	Ser	Lys	Ala
			35					40					45		
Asn	Leu	His	Thr	Leu	Gly	Gln	Leu	Lys	Leu	Ser	Arg	Arg	Cys	Arg	Glu
	50					55				60					
Pro	Arg	Leu	Gly	Arg	Ala	Gly	Gln	Gln	Arg	Leu	His	Pro	Arg	Thr	Arg
65					70				75					80	
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Gly Lys

<210> 5983

<211> 790

<212> DNA

<213> Homo sapiens

<400> 5983

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<210> 5984

<211> 186

<212> PRT

<213> Homo sapiens

<400> 5984

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			20					25					30		
Glu	Val	Asn	Arg	Gln	Cys	Pro	Gly	Glu	Lys	Glu	Pro	Val	Ser	Asp	Leu
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Thr	His	Ser	Gly	Arg	Gly	Thr	Met	Tyr	Ser	Ser	Trp	Val	Lys	Ser	Pro
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Asp	Arg	Thr	Gly	Val	Asn	Phe	Ser	Val	Asn	Ser	Asn	Leu	Arg	Asp	Leu
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Thr	Pro	Ser	His	Gln	Leu	Glu	Val	Gly	Gly	Gly	Phe	Arg	Ile	Ser	Glu
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Ser	Lys	Cys	Leu	Met	Gln	Asp	Asp	Thr	Arg	Gly	Met	Phe	Met	Glu	Thr
								130			135			140	
Thr	Val	Phe	Cys	Thr	Ser	Glu	Asp	Gly	Leu	Val	Ser	Gly	Phe	Gly	Arg
								145			150			155	160
Thr	Val	Asn	Asp	Asn	Leu	Ile	Asp	Gly	Asn	Cys	Thr	Pro	Gln	Asn	Pro
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185

<210> 5985

<211> 737

<212> DNA

<213> Homo sapiens

<400> 5985

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 360
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<210> 5986

<211> 165

<212> PRT

<213> Homo sapiens

<400> 5986

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Gln	Gln	Val	Cys	Ser	Lys	Gln	Leu	Pro	Pro	Cys	Asn	Leu	Ser	Lys	Glu
		20						25					30		
Asp	Leu	Leu	Gln	Asn	Pro	Tyr	Phe	Ser	Lys	Leu	Leu	Asn	Leu	Ser	
		35					40					45			
Gln	His	Val	Asp	Glu	Ser	Gly	Leu	Ser	Leu	Thr	Leu	Ala	Lys	Glu	Gln
		50				55					60				
Ala	Gln	Ala	Trp	Lys	Glu	Val	Arg	Leu	His	Lys	Thr	Thr	Trp	Leu	Arg
65					70					75				80	
Ser	Glu	Ile	Leu	His	Arg	Val	Ile	Gln	Glu	Leu	Leu	Val	Asp	Tyr	Tyr
				85					90					95	
Val	Lys	Ile	Gln	Asp	Thr	Asn	Val	Thr	Ser	Glu	Asp	Lys	Lys	Phe	His

	100		105		110
Glu Thr Leu Glu Gln Arg Leu Leu Val Thr Glu Leu Met Arg Leu Leu					
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Gly Pro Ser Gln Glu Arg Glu Ile Pro Pro Leu Leu Gly Leu Glu Lys					
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<210> 5987

<211> 1444

<212> DNA

<213> Homo sapiens

<400> 5987

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1140

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<211> 216

<212> PRT

<213> Homo sapiens

<400> 5988

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		20						25					30		
Thr	Pro	Ser	Glu	Arg	Gly	Met	Thr	Tyr	Asp	Ala	Leu	His	Val	Phe	Asp
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Trp	Ile	Lys	Ala	Arg	Ser	Gly	Asp	Asn	Pro	Val	Tyr	Ile	Trp	Gly	His
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Glu	Thr	Pro	Pro	Asp	Ala	Leu	Ile	Leu	Glu	Ser	Pro	Phe	Thr	Asn	Ile
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			100						105					110	
Pro	Gly	Phe	Asp	Trp	Phe	Phe	Leu	Asp	Pro	Ile	Thr	Ser	Ser	Gly	Ile
		115					120						125		
Lys	Phe	Ala	Asn	Asp	Glu	Asn	Val	Lys	His	Ile	Ser	Cys	Pro	Leu	Leu
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Ile	Leu	His	Ala	Glu	Asp	Asp	Pro	Val	Val	Pro	Phe	Gln	Leu	Gly	Arg
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			165						170					175	
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<211> 1583

<212> DNA

<213> Homo sapiens

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<210> 5990
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 35 40 45
 Val Asn Thr His Val Trp Thr Lys Ser Lys Phe Met Gly Met Ser Val
 50 55 60
 Gly Val Ser Met Ile Gly Glu Gly Val Leu Arg Leu Leu Glu His Gly
 65 70 75 80
 Glu Glu Tyr Val Phe Thr Leu Pro Ser Ala Tyr Ala Arg Ser Ile Leu
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 Thr Ile Pro Trp Val Glu Leu Gly Gly Lys Val Ser Ile Asn Cys Ala
 100 105 110
 Lys Thr Gly Tyr Ser Ala Thr Val Ile Phe His Thr Lys Pro Phe Tyr
 115 120 125
 Gly Gly Lys Val His Arg Val Thr Ala Glu Val Lys His Asn Pro Thr
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 Asn Thr Ile Val Cys Lys Ala His Gly Glu Trp Asn Gly Thr Leu Glu
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 Phe Thr Tyr Asn Asn Gly Glu Thr Lys Val Ile Asp Thr Thr Thr Leu
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 Pro Val Tyr Pro Lys Lys Ile Arg Pro Leu Glu Lys Gln Gly Pro Met
 180 185 190
 Glu Ser Arg Asn Leu Trp Arg Glu Val Thr Arg Tyr Leu Arg Leu Gly
 195 200 205
 Asp Ile Asp Ala Ala Thr Glu Gln Lys Arg His Leu Glu Glu Lys Gln
 210 215 220
 Arg Val Glu Glu Arg Lys Arg Glu Asn Leu Arg Thr Pro Trp Lys Pro
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<210> 5992

<211> 301

<212> PRT

<213> Homo sapiens

<400> 5992

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		20						25					30		
Val	Val	Phe	Asp	Glu	Ala	Asp	Arg	Leu	Phe	Glu	Met	Gly	Phe	Ala	Glu
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Gln	Leu	Gln	Glu	Ile	Ile	Ala	Arg	Leu	Pro	Gly	Gly	His	Gln	Thr	Val
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			165					170					175		
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<211> 72

<212> PRT

<213> Homo sapiens

<400> 5998

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<211> 757

<212> PRT

<213> Homo sapiens

<400> 6000

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Ala Gln Leu Tyr Lys Glu	Glu His Leu Arg Asn	Arg Gln His Pro His
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Cys Tyr Val Gln Tyr Met	Ile Ala Ile Ile Asn	Asn Cys Gln Thr Phe
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<212> DNA

<213> Homo sapiens

<400> 6001

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<212> PRT

<213> Homo sapiens

<400> 6002

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<210> 6004

<211> 140

<212> PRT

<213> Homo sapiens

<400> 6004

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Pro	Ala	Val	Pro	Lys	Val	Ala	Pro	Gly	Thr	Met	Pro	Thr	Arg	Pro	Glu
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	50				55					60					
Ser	Pro	Arg	Gly	Glu	Arg	Gly	Ser	Gly	Pro	His	Ala	Val	Gln	Gly	Val
65				70				75						80	
Ala	Leu	Pro	Xaa	Arg	Gly	Ser	Pro	Arg	Gly	Pro	Gly	Pro	Arg	Ala	Pro
			85					90					95		
Gly	Arg	Gly	Arg	Asp	Cys	Gly	Gly	Asn	Gly	Pro	Ala	Glu	Ala	Pro	Ala

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<210> 6005
 <211> 1735
 <212> DNA
 <213> Homo sapiens

<400> 6005
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<210> 6006

<211> 200

<212> PRT

<213> Homo sapiens

<400> 6006

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			20					25					30		
Gly	Glu	Ala	Gly	Glu	Met	Gly	Leu	Ser	Gly	Leu	Pro	Gly	Ala	Asp	Gly
		35					40					45			
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Gly	Pro	Met	Gly	Leu	Gln	Gly	Ile	Gln	Gly	Pro	Lys	Gly	Leu	Asp	Gly
			85						90					95	
Ala	Lys	Gly	Glu	Lys	Gly	Ala	Ser	Gly	Glu	Arg	Gly	Ser	Ser	Gly	Leu
			100					105					110		
Pro	Gly	Pro	Val	Gly	Pro	Pro	Gly	Leu	Ile	Gly	Leu	Pro	Gly	Thr	Lys
		115					120					125			
Gly	Glu	Lys	Gly	Arg	Pro	Gly	Glu	Pro	Gly	Leu	Asp	Gly	Phe	Pro	Gly
	130					135					140				
Pro	Arg	Gly	Glu	Lys	Gly	Asp	Arg	Ser	Glu	Arg	Gly	Glu	Lys	Gly	Glu
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Arg	Gly	Val	Pro	Gly	Arg	Lys	Gly	Val	Lys	Gly	Gln	Lys	Gly	Glu	Pro
			165					170					175		
Gly	Pro	Pro	Gly	Leu	Asp	Gln	Pro	Cys	Pro	Val	Gly	Pro	Asp	Gly	Leu
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<210> 6007

<211> 693

<212> DNA

<213> Homo sapiens

<400> 6007

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<210> 6008

<211> 214

<212> PRT

<213> Homo sapiens

<400> 6008

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			20					25					30		
Gly	Lys	Met	Val	Lys	Lys	Val	Cys	Pro	Cys	Asn	Gln	Leu	Cys	Arg	Thr
		35					40					45			
Ser	Ser	Thr	Asn	Thr	Val	Gly	Ala	Thr	Val	Asn	Ser	Gln	Ala	Ala	Gln
		50				55					60				
Ala	Gln	Pro	Pro	Ala	Met	Thr	Ser	Ser	Arg	Lys	Gly	Thr	Phe	Thr	Asp
65					70					75				80	
Asp	Leu	His	Lys	Leu	Val	Asp	Asn	Trp	Ala	Arg	Asp	Ala	Met	Asn	Leu
			85						90				95		
Ser	Gly	Arg	Arg	Gly	Ser	Lys	Gly	His	Met	Asn	Tyr	Glu	Gly	Pro	Gly
			100				105						110		
Met	Ala	Arg	Lys	Phe	Ser	Ala	Pro	Gly	Gln	Leu	Cys	Ile	Ser	Met	Thr
		115					120					125			
Ser	Asn	Leu	Gly	Gly	Ser	Ala	Pro	Ile	Ser	Ala	Ala	Ser	Ala	Thr	Ser
		130				135					140				
Leu	Gly	His	Phe	Thr	Lys	Ser	Met	Cys	Pro	Pro	Gln	Gln	Tyr	Gly	Phe
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Pro	Ala	Thr	Pro	Phe	Gly	Ala	Gln	Trp	Ser	Gly	Thr	Gly	Gly	Pro	Ala

			165					170				175			
Pro	Gln	Pro	Leu	Gly	Gln	Phe	Gln	Pro	Val	Gly	Thr	Ala	Ser	Leu	Gln
			180					185					190		
Asn	Phe	Asn	Ile	Ser	Asn	Leu	Gln	Lys	Ser	Ile	Ser	Asn	Pro	Pro	Gly
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<210> 6009

<211> 1570

<212> DNA

<213> Homo sapiens

<400> 6009

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<210> 6010

<211> 468

<212> PRT

<213> Homo sapiens

<400> 6010

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			20					25					30		
Asp	Thr	Val	Tyr	Asp	Val	Val	Val	Ser	Gly	Gly	Gly	Leu	Val	Gly	Ala
		35					40					45			
Ala	Met	Ala	Cys	Ala	Leu	Gly	Tyr	Asp	Ile	His	Phe	His	Asp	Lys	Lys
	50					55					60				
Ile	Leu	Leu	Leu	Glu	Ala	Gly	Pro	Lys	Lys	Val	Leu	Glu	Lys	Leu	Ser
65				70						75				80	
Glu	Thr	Tyr	Ser	Asn	Arg	Val	Ser	Ser	Ile	Ser	Pro	Gly	Ser	Ala	Thr
				85					90					95	
Leu	Leu	Ser	Ser	Phe	Gly	Ala	Trp	Asp	His	Ile	Cys	Asn	Met	Arg	Tyr
				100				105					110		
Arg	Ala	Phe	Arg	Arg	Met	Gln	Val	Trp	Asp	Ala	Cys	Ser	Glu	Ala	Leu
		115				120					125				
Ile	Met	Phe	Asp	Lys	Asp	Asn	Leu	Asp	Asp	Met	Gly	Tyr	Ile	Val	Glu
	130					135				140					
Asn	Asp	Val	Ile	Met	His	Ala	Leu	Thr	Lys	Gln	Leu	Glu	Ala	Val	Ser
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Asp	Arg	Val	Thr	Val	Leu	Tyr	Arg	Ser	Lys	Ala	Ile	Arg	Tyr	Thr	Trp
				165					170					175	
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Phe	Val Asp Ala Val Asn Ser Ala Phe Trp Ser Asp Ala Asp His Thr				
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Asp	Phe Ile Asp Thr Ala Gly Ala Met Leu Gln Tyr Pro Val Ser Leu				
305		310		315	320
Leu	Lys Pro Thr Lys Val Ser Ala Arg Gln Leu Pro Pro Ser Val Pro				
	325		330		335
Trp	Val Asp Ala Lys Ser Arg Val Leu Phe Pro Leu Gly Leu Gly His				
	340		345		350
Ala	Ala Glu Tyr Val Arg Pro Arg Val Ala Leu Ile Gly Asp Ala Ala				
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His	Arg Val His Pro Leu Ala Gly Gln Gly Val Asn Met Gly Phe Gly				
	370		375		380
Asp	Ile Ser Ser Leu Ala His His Leu Ser Thr Ala Ala Phe Asn Gly				
385		390		395	400
Lys	Asp Leu Gly Ser Val Ser His Leu Thr Gly Tyr Glu Thr Glu Arg				
	405		410		415
Gln	Arg His Asn Thr Ala Leu Leu Ala Ala Thr Asp Leu Leu Lys Arg				
	420		425		430
Leu	Tyr Ser Thr Ser Ala Ser Pro Leu Val Leu Leu Arg Thr Trp Gly				
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Leu	Gln Ala Thr Asn Ala Val Ser Pro Leu Lys Glu Gln Ile Met Ala				
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<210> 6011

<211> 1331

<212> DNA

<213> Homo sapiens

<400> 6011

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<210> 6012

<211> 219

<212> PRT

<213> Homo sapiens

<400> 6012

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			20					25					30		
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			85						90					95	
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			100					105					110		
Val	Val	Lys	Val	Leu	Leu	Asp	Cys	Gly	Ala	Asp	Pro	Asp	Ser	Arg	Asp
			115					120				125			
Phe	Asp	Asn	Asn	Thr	Pro	Leu	His	Ile	Ala	Ala	Gln	Asn	Asn	Cys	Pro
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	180		185		190
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<210> 6013

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<212> DNA

<213> Homo sapiens

<400> 6013

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<211> 182

<212> PRT

<213> Homo sapiens

<400> 6014

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Leu Ser Met Ser Cys Asn Gln Asn Lys Leu Asp Ser Pro Gly Arg Ala

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Ser His Gly Ser Ser Leu Pro Phe Asn Gln Asp Ser Gln Lys Pro Ala					
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Gln Tyr Ile					

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 <212> DNA
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<211> 537

<212> PRT

<213> Homo sapiens

<400> 6018

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 Asn Ser Gln Gln Ala Ala Asn Val Leu Ser Gly Ala Cys Gly Leu Gln
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 Arg Gly Asp Arg Val Ala Val Met Leu Pro Arg Val Pro Glu Trp Trp
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 Thr Ile Gln Met Lys Ser Thr Asp Ile Leu Tyr Arg Leu Gln Met Ser
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 Thr Val Ala Ser Glu Cys Pro Ser Leu Arg Ile Lys Leu Leu Val Ser

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His Ser Tyr Ser Ser Leu Gly Leu Lys Ala Lys Met Asp Ala Gly Trp					
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Thr Gly Leu Gln Ala Ser Asp Ile Met Trp Thr Ile Ser Asp Thr Gly					
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Ala Cys Thr Phe Val His Leu Leu Pro Lys Phe Asp Pro Leu Val Ile					
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Pro His Leu Gln Asn Cys Leu Ala Gly Gly Glu Ser Leu Leu Pro Glu					
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Thr Leu Glu Asn Trp Arg Ala Gln Thr Gly Leu Asp Ile Arg Glu Phe					
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Tyr Gly Gln Thr Glu Thr Gly Leu Thr Cys Met Val Ser Lys Thr Met					
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Asp Ile Gly Ile Arg Val Lys Pro Ile Arg Pro Ile Gly Ile Phe Ser					
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Gly Tyr Val Glu Asn Pro Asp Lys Thr Ala Ala Asn Ile Arg Gly Asp					
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Gln Phe Met Gly Arg Ala Asp Asp Ile Ile Asn Ser Ser Gly Tyr Arg					
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Ile Gly Pro Ser Glu Val Glu Asn Ala Leu Met Lys His Pro Ala Val					
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Val Glu Thr Ala Val Ile Ser Ser Pro Asp Pro Val Arg Gly Glu Val					
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Val Lys Ala Phe Val Val Leu Ala Ser Gln Phe Leu Ser His Asp Pro					
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Glu Gln Leu Thr Lys Glu Leu Gln Gln His Val Lys Ser Val Thr Ala					
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Pro Tyr Lys Tyr Pro Arg Lys Ile Glu Phe Val Leu Asn Leu Pro Lys					
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<210> 6019

<211> 3002

<212> DNA

<213> Homo sapiens

<400> 6019

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<211> 387

<212> PRT

<213> Homo sapiens

<400> 6020

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His Pro Leu Phe Glu Gly Gly Ile Cys Ala Pro Cys Lys Asp Lys Phe
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Leu Asp Ala Leu Phe Leu Tyr Asp Asp Asp Gly Tyr Gln Ser Tyr Cys
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Ser Ile Cys Cys Ser Gly Glu Thr Leu Leu Ile Cys Gly Asn Pro Asp
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Ser Trp Tyr Leu Phe Gln Phe His Arg Phe Leu Gln Tyr Ala Arg Pro
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<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

<400> 6022

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Lys	Gln	Val	Phe	Gly	Gln	Thr	Thr	Ile	His	Gln	His	Ile	Pro	Phe	Asn	145	150	155	160
Trp	Asp	Ser	Glu	Phe	Val	Gln	Leu	His	Phe	Gly	Lys	Glu	Arg	Lys	Arg	165	170	175	
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Tyr Lys Leu Ala Val Ala Thr Phe Ala Gly Ile Glu Asn Lys Phe Gly
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<211> 1014

<212> DNA

<213> Homo sapiens

<400> 6023

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<213> Homo sapiens

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 Pro Ile Lys Ile Ser Ser Thr Pro Pro Ser Gly Ser Arg Leu Asp Pro
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 Gln Ile Ala Ser Ser Ala Phe Pro Gly Leu Gly Ser Leu Gly Gly Gln
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<211> 496

<212> PRT

<213> Homo sapiens

<400> 6026

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Ile Pro Ser Arg Ala Gly Ala Asn Trp Ser Val Asn Phe His Arg Ile			
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Thr Ser Asp Asn Gly Lys Asp Gly Leu Ala Tyr Ser Ala Leu Leu Lys			
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Asn Glu Leu Leu Gly Ala Gly Ile Glu Lys Val Gln Asp Pro Gln Thr			
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Glu Asp Arg Arg Leu Gln Pro Ser Thr Pro Glu Lys Lys Gly Leu Phe			
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Val Ser Pro Tyr Ser Leu Ser Pro Val Ser Asn Lys Ser Gln Lys Leu			
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Val Tyr Leu Trp Ser Ala Cys Thr Ser Gln Val Thr Arg Leu Cys Asp			
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Glu	Tyr	Lys	Tyr	Asn	Val	Glu	Ala	Val	Glu	Leu	Leu	Ile	Arg	Asn
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Gly	Asn	Ala	Pro	Glu	Gly	Leu	Pro	Gln	Leu	Met	Glu	Val	Val	Arg
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His	Ser	Ala	Ala	Ala	Gly	Arg	Asp	Ser	Thr	Lys	Ala	Phe	Ser	Ala
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Phe	Gln	Gln	Leu	Pro	Tyr	His	Arg	Ile	Phe	Ile	Met	Leu	Leu	Leu	Glu						
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Gly	Leu	Leu	Ile	Thr	Phe	Ile	Glu	Leu	Ile	Lys	Asn	Pro	Ala	Phe	Lys						
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 <213> Homo sapiens

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<210> 6036
 <211> 102
 <212> PRT
 <213> Homo sapiens

<400> 6036
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 Arg Gln Val Leu Gln Glu Pro Ser Arg Glu Pro Pro Gly Trp Leu Gly
 35 40 45
 Ala Trp Pro Arg Ser Gln Ser His Asn Ala His His Cys Pro Thr Met
 50 55 60
 Pro Phe Arg Met Glu Pro Leu Ile His Trp Ala His Ser His Gly Gln
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 <211> 3910
 <212> DNA
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<211> 214

<212> PRT

<213> Homo sapiens

<400> 6038

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Gly	Tyr	Val	His	Pro	Asp	Leu	Leu	Lys	Asp	Phe	Cys	Met	Asn	Pro	Gln
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Thr	Val	Leu	Leu	Leu	Arg	Val	Ile	Ala	Ala	Phe	Cys	Phe	Leu	Gly	Ile
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Leu	Cys	Ser	Leu	Ser	Ala	Phe	Leu	Leu	Asp	Val	Phe	Gly	Pro	Lys	His
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Pro	Ala	Leu	Lys	Ile	Thr	Arg	Arg	Tyr	Ala	Phe	Ala	His	Ile	Leu	Thr
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Val	Leu	Gln	Cys	Ala	Thr	Val	Ile	Gly	Phe	Ser	Tyr	Trp	Ala	Ser	Glu
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Gly	Ala	Ser	Ile	Leu	Ala	Thr	Ala	Ala	Asn	Leu	Leu	Arg	His	Tyr	Pro
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Thr	Glu	Glu	Glu	Glu	Gln	Ala	Leu	Glu	Leu	Leu	Ser	Glu	Met	Glu	Glu
		180						185				190			
Asn	Glu	Pro	Tyr	Pro	Ala	Glu	Tyr	Glu	Val	Ile	Asn	Gln	Phe	Gln	Pro
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<212> DNA
<213> Homo sapiens

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<211> 312
<212> PRT
<213> Homo sapiens

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 Gln Asn Val Val Pro Glu Ala Glu Gly Glu Asp Asp Pro Ala Gly Glu
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 Ala Gln Ala Gly Arg Leu Pro Leu Leu Pro Cys Ala Arg Ala Tyr Val
 65 70 75 80
 Ser Pro Arg Ala Pro Phe Tyr Arg Pro Leu Ala Pro Glu Leu Arg Ala
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 Arg Gln Leu Glu Leu Gly Ala Glu His Ala Leu Leu Leu Asp Ala Ala
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 Gly Gln Val Phe Ser Trp Gly Gly Arg His Gly Gln Leu Gly His
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 Gly Thr Leu Glu Ala Glu Leu Glu Pro Arg Leu Leu Glu Ala Leu Gln
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 Gly Leu Val Met Ala Glu Val Ala Ala Gly Gly Trp His Ser Val Cys
 145 150 155 160
 Val Ser Glu Thr Gly Asp Ile Tyr Ile Trp Gly Trp Asn Glu Ser Gly
 165 170 175
 Gln Leu Ala Leu Pro Thr Arg Asn Leu Ala Glu Asp Gly Glu Thr Val
 180 185 190
 Ala Arg Glu Ala Thr Glu Leu Asn Glu Asp Gly Ser Gln Val Lys Arg
 195 200 205
 Thr Gly Gly Ala Glu Asp Gly Ala Pro Ala Pro Phe Ile Ala Val Gln
 210 215 220
 Pro Phe Pro Ala Leu Leu Asp Leu Pro Met Gly Ser Asp Ala Val Lys
 225 230 235 240
 Ala Ser Cys Gly Ser Arg His Thr Ala Val Val Thr Arg Thr Gly Glu
 245 250 255
 Leu Tyr Thr Trp Gly Trp Gly Lys Tyr Gly Gln Leu Gly His Glu Asp
 260 265 270
 Thr Thr Ser Leu Asp Arg Pro Arg Arg Val Glu Tyr Phe Val Asp Lys
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<210> 6041

<211> 291

<212> DNA

<213> Homo sapiens

<400> 6041

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35 40 45
Ile Met Ala Ala Leu Asn Ser Gln Thr Ala Val Gln Phe Gln Gln Tyr
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Ala Ala Gln Gln Tyr Pro Gly Asn Tyr Glu Gln Gln Gln Ile Leu Ile
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<212> DNA
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<213> Homo sapiens

<400> 6044

Met Leu Cys Gln Thr Pro Gly Ala Ala Thr Pro Met Glu Leu Gln Asp
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 Cys Tyr Leu Ser Asn Val Asp Gly Gly Glu His Pro Cys Pro Arg Leu
 20 25 30
 Lys Ile Ala Pro Leu Glu Ser His His Arg Pro Lys Arg Pro Asp Asp
 35 40 45
 Pro Pro Gly Thr Leu Asn Pro Cys Pro Glu Arg Gly Gly Ala Gly Val
 50 55 60
 Trp Ile Pro Ala Gly Ser Phe Gly Thr Gly Lys Asn Arg Gly Cys Ser
 65 70 75 80
 Asp Arg Val Phe Thr Lys Thr Cys Ile Arg Gln Asp Pro Gly Arg Met
 85 90 95
 Trp Val Ala Pro Pro Leu Cys Trp Ala Arg Arg Met Cys Pro His Arg
 100 105 110
 Ser Gln Ile Leu Phe Pro Gln Trp Val Val Gln Asp Thr Leu Asn Phe
 115 120 125
 Cys Met Asn Trp Asp Ile Gln Asn Ser Leu Glu Gln Pro Pro Pro Ser
 130 135 140
 Thr Leu Cys Leu Asp Ile Ser Tyr
 145 150

<210> 6045

<211> 1916

<212> DNA

<213> Homo sapiens

<400> 6045

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 120
 gtgttcacag acatcgacat ctccagagac ctgcaagaaa tatgcaggaa acagggagtt
 180
 gctgtgtata tccttctgga ccaggctctc ctctctcaat ttctggatat gtgcatggat
 240
 ctgaaagtgc atcctgaaca ggaaaagtta atgacagttc ggactatcac aggaaatata
 300
 tactatgcaa ggtcaggaac taagattatt gggaagggtc acgaaaagtt cacgttgatt
 360
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 420
 agcagtaact tggaattct gtctggccaa gtggttgaac actttgatct ggagttccga
 480
 atcctgtatg ccagtcctaa gccatcagc cccaaactcc tgtctcactt ccagagcagc
 540
 aacaagtttg atcacctcac caaccgaaaa ccacagtcca aggagctcac cctgggcaac
 600
 ctgctgcgga tgcggctggc taggtgttca agtactccca ggaaggcgga cctggaccca
 660
 gagatgcccg cagagggcaa ggcagagcgc aagccccatg actgtgagtc ctctactgtt
 720
 agtgaggaag actacttcag cagccacagg gacgagctcc agagcagaaa ggccattgac
 780

gctgccactc aaacagagcc aggagaggag atgccagggc tgagtgtgag tgaggtggga
 840
 acacaaacca gcataccac agcatgtgct ggtaccaga ctgcagtcac caccaggata
 900
 gcaagctctc aaaccacgat ttggtccaga tcgaccacta ctcagactga catggatgag
 960
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 1020
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 1080
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 1140
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 1200
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 1260
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 1380
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 1500
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 1560
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 1620
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 1680
 aagattataa tactgtattt ttactatacc ttttctgtgt ttagatacaa ataccattat
 1740
 gttacagttg cctacagtat tcagtgcagt aacatgatgt acaggtttgt agcctgtttt
 1800
 gcatttttct taggttgat gctcttctgt tttaaagggt tgaatcacca gcatttttgt
 1860
 gatcaaaatc ctatttagaa aaaataaaac tactttctgt ttaaaaaaaaa aacaaa
 1916

<210> 6046

<211> 457

<212> PRT

<213> Homo sapiens

<400> 6046

Thr	Arg	Val	Glu	Thr	His	Phe	Gln	Pro	Arg	Gly	Ala	Gly	Glu	Gly	Gly
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Pro	Tyr	Gly	Cys	Lys	Asp	Ala	Leu	Arg	Gln	Gln	Leu	Arg	Ser	Ala	Arg
			20				25					30			
Glu	Val	Ile	Ala	Val	Val	Met	Asp	Val	Phe	Thr	Asp	Ile	Asp	Ile	Phe
	35						40				45				
Arg	Asp	Leu	Gln	Glu	Ile	Cys	Arg	Lys	Gln	Gly	Val	Ala	Val	Tyr	Ile
	50					55				60					
Leu	Leu	Asp	Gln	Ala	Leu	Leu	Ser	Gln	Phe	Leu	Asp	Met	Cys	Met	Asp

65					70					75				80	
Leu	Lys	Val	His	Pro	Glu	Gln	Glu	Lys	Leu	Met	Thr	Val	Arg	Thr	Ile
				85					90					95	
Thr	Gly	Asn	Ile	Tyr	Tyr	Ala	Arg	Ser	Gly	Thr	Lys	Ile	Ile	Gly	Lys
		100						105					110		
Val	His	Glu	Lys	Phe	Thr	Leu	Ile	Asp	Gly	Ile	Arg	Val	Ala	Thr	Gly
		115					120				125				
Ser	Tyr	Ser	Phe	Thr	Trp	Thr	Asp	Gly	Lys	Leu	Asn	Ser	Ser	Asn	Leu
	130					135					140				
Val	Ile	Leu	Ser	Gly	Gln	Val	Val	Glu	His	Phe	Asp	Leu	Glu	Phe	Arg
145					150					155					160
Ile	Leu	Tyr	Ala	Gln	Ser	Lys	Pro	Ile	Ser	Pro	Lys	Leu	Leu	Ser	His
			165						170					175	
Phe	Gln	Ser	Ser	Asn	Lys	Phe	Asp	His	Leu	Thr	Asn	Arg	Lys	Pro	Gln
		180					185					190			
Ser	Lys	Glu	Leu	Thr	Leu	Gly	Asn	Leu	Leu	Arg	Met	Arg	Leu	Ala	Arg
		195				200					205				
Leu	Ser	Ser	Thr	Pro	Arg	Lys	Ala	Asp	Leu	Asp	Pro	Glu	Met	Pro	Ala
	210					215					220				
Glu	Gly	Lys	Ala	Glu	Arg	Lys	Pro	His	Asp	Cys	Glu	Ser	Ser	Thr	Val
225					230					235					240
Ser	Glu	Glu	Asp	Tyr	Phe	Ser	Ser	His	Arg	Asp	Glu	Leu	Gln	Ser	Arg
			245					250					255		
Lys	Ala	Ile	Asp	Ala	Ala	Thr	Gln	Thr	Glu	Pro	Gly	Glu	Glu	Met	Pro
		260					265					270			
Gly	Leu	Ser	Val	Ser	Glu	Val	Gly	Thr	Gln	Thr	Ser	Ile	Thr	Thr	Ala
	275					280					285				
Cys	Ala	Gly	Thr	Gln	Thr	Ala	Val	Ile	Thr	Arg	Ile	Ala	Ser	Ser	Gln
	290					295				300					
Thr	Thr	Ile	Trp	Ser	Arg	Ser	Thr	Thr	Thr	Gln	Thr	Asp	Met	Asp	Glu
305					310					315					320
Asn	Ile	Leu	Phe	Pro	Arg	Gly	Thr	Gln	Ser	Thr	Glu	Gly	Ser	Pro	Val
			325					330					335		
Ser	Lys	Met	Ser	Val	Ser	Arg	Ser	Ser	Ser	Leu	Lys	Ser	Ser	Ser	Ser
		340					345					350			
Val	Ser	Ser	Gln	Gly	Ser	Val	Ala	Ser	Ser	Thr	Gly	Ser	Pro	Ala	Ser
	355					360					365				
Ile	Arg	Thr	Thr	Asp	Phe	His	Asn	Pro	Gly	Tyr	Pro	Lys	Tyr	Leu	Gly
	370				375						380				
Thr	Pro	His	Leu	Glu	Leu	Tyr	Leu	Ser	Asp	Ser	Leu	Arg	Asn	Leu	Asn
385					390					395					400
Lys	Glu	Arg	Gln	Phe	His	Phe	Ala	Gly	Ile	Arg	Ser	Arg	Leu	Asn	His
			405					410					415		
Met	Leu	Ala	Met	Leu	Ser	Arg	Arg	Thr	Leu	Phe	Thr	Glu	Asn	His	Leu
		420					425					430			
Gly	Leu	His	Ser	Gly	Asn	Phe	Ser	Arg	Val	Asn	Leu	Leu	Ala	Val	Arg
	435				440						445				
Asp	Val	Ala	Leu	Tyr	Pro	Ser	Tyr	Gln							
	450				455										

<210> 6047

<211> 773

<212> DNA

<213> Homo sapiens

<400> 6047

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 120
 gatgggaaat gggggatctc atcgcttggt agtagaggag actttggggg gaaagtgatg
 180
 gaggatgggg caagggatcc ggtgtccaac tctgtgtgtc cctgcagctc ccgtagccca
 240
 gcagggaaga tgaccttctg gccctaagc aggcggaagg cagggtggcg ccgccggagc
 300
 aatggtgcaa acagctcttc tccagtgtgg tccccgtgct gctggggggac ccagaggagg
 360
 agccgggtgg gcggcagctc ctggacctca attgcttttt gtccgacatc tcggacactc
 420
 tcttcacat gactcagtc gcccttcgc cctgcagct gccgcctgag gatgcctacg
 480
 tcggcaatgc tgacatgac cagccggacc tgacgccact gcagccaagc ctggatgact
 540
 tcattggacat ctacagattc tttaccaact cccgcctccc acagccgcc atgccttcaa
 600
 acttcccaga gcccccaac ttcagccccg tggttgactc cctcttcagc agtgggaccc
 660
 tgggcccaga ggtgccccg gcttctcgg ccatgacca cctctctgga cacagccgtc
 720
 tgcaggctcg gaacagctgc cctgccccctg tgctgctac taaatgaatt gcg
 773

<210> 6048

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6048

Met Val Lys Arg Val Ser Glu Met Ser Asp Lys Lys Gln Leu Arg Ser
 1 5 10 15
 Arg Ser Cys Arg Pro Pro Gly Ser Ser Ser Gly Ser Pro Ser Ser Thr
 20 25 30
 Gly Thr Thr Leu Glu Lys Ser Cys Leu His His Cys Ser Gly Gly Gly
 35 40 45
 His Leu Pro Ser Ala Cys Leu Gly Ala Arg Arg Ser Ser Ser Leu Leu
 50 55 60
 Gly Tyr Gly Ser Cys Arg Asp Thr Gln Ser Trp Thr Pro Asp Pro Leu
 65 70 75 80
 Pro His Pro Pro Ser Leu Ser Pro Gln Ser Leu Leu Tyr Ser Gln Ala
 85 90 95
 Met Arg Ser Pro Ile Ser His Gln Glu Leu Thr Arg Pro Leu Gly Lys
 100 105 110
 Glu Ala Ala Arg Arg Arg Cys Gly His Thr Val Ala Leu Ser Ala Arg
 115 120 125
 Asp

<210> 6049

<211> 479

<212> DNA

<213> Homo sapiens

<400> 6049

accggttttt cttccccag tcctcagct gctgctgctg ctcaggaggt cagatctgcc
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120
agcagcagta gcagcagtaa cagtagtaac gagagagaag actttgattc cacctcttcc
180
tcctcttcca ctctccttt acaaccagg gattcggcac ccccttcaac ctgctccttc
240
tgctggggg tttcagtggc tgcttcagc cacgtaccga tacagaagaa gctgcgtttt
300
gaagacaccc tggagtgtgt agggtttgat gcgaagatgg ctgaggaatc ctctcctcc
360
tcctcctcat cttaccaaac tgctgcaaca tctcaggagc agcaacttaa aaataagagt
420
atattaatct cttctgtggg ttcggtgcat catgcagacg ggctagccga atcttctac
479

<210> 6050

<211> 159

<212> PRT

<213> Homo sapiens

<400> 6050

Thr	Gly	Phe	Ser	Ser	Pro	Ser	Pro	Ser	Ala	Ala	Ala	Ala	Ala	Gln	Glu
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Val	Arg	Ser	Ala	Thr	Asp	Gly	Asn	Thr	Ser	Thr	Thr	Pro	Pro	Thr	Ser
			20					25					30		
Ala	Lys	Lys	Arg	Lys	Leu	Asn	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Asn	Ser
			35				40						45		
Ser	Asn	Glu	Arg	Glu	Asp	Phe	Asp	Ser	Thr	Ser	Ser	Ser	Ser	Ser	Thr
	50					55					60				
Pro	Pro	Leu	Gln	Pro	Arg	Asp	Ser	Ala	Ser	Pro	Ser	Thr	Ser	Ser	Phe
65					70					75					80
Cys	Leu	Gly	Val	Ser	Val	Ala	Ala	Ser	Ser	His	Val	Pro	Ile	Gln	Lys
				85					90					95	
Lys	Leu	Arg	Phe	Glu	Asp	Thr	Leu	Glu	Phe	Val	Gly	Phe	Asp	Ala	Lys
			100					105					110		
Met	Ala	Glu	Glu	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Ser	Pro	Thr	Ala
	115						120					125			
Ala	Thr	Ser	Gln	Glu	Gln	Gln	Leu	Lys	Asn	Lys	Ser	Ile	Leu	Ile	Ser
	130						135					140			
Ser	Val	Gly	Ser	Val	His	His	Ala	Asp	Gly	Leu	Ala	Glu	Ser	Ser	
145					150							155			

<210> 6051

<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6051

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120
ttacagcagc gtcgatttaa tggctcagac ggaggggttt catggtctcc tatggatgat
180
gaacttcttg cacagccaca gggtatgaaa ttattagatt cactccgaga gcaatatacc
240
cgctaccagg aagttttagt gcaacgtagc aagcgcacac agttagaaga gattcaacag
300
aaggtaatgc aggtggtgaa ctggctagaa gggcctggat cagaacaact aagagcccag
360
tggggcattg gagactccat tagggcctcc caggccctac agcagaaaca cgaagagatt
420
gagagccagc acagtgaatg gtttgcagtg tatgtggaac ttaatcagca aattgcagca
480
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540
agtgtatgtt gttatcgaca ggccagtcag ctggaattta ggcaaaatct cttacaagca
600
gctcttgaat ttcattggtg tgcccaagat ttgtctcagc agttggatgg cttattaggg
660
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720
cttgaagaga agctgaaaag tgttgatgtg ggattgcaag gtttgcgtga aaaagggtcaa
780
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840
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900
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1020
gctctgctta agactcacat cagattgggc gatgatgctc aagaaacgaa agttttgctg
1080
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1140
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1200
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1320
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1380
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1440
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1560

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 1620
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 1800
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 1860
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 1920
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 1980
 cctcaaaatt ttactttgta attcttcaga attgattatt tttattgtgt caatacagag
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 2280
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 2400
 caac
 2404

<210> 6052

<211> 518

<212> PRT

<213> Homo sapiens

<400> 6052

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Val	Asp	Leu	Asn	Phe	Leu	Pro	Ser	Val	Asp	Pro	Glu	Thr	Val	Leu	Gln
			20					25					30		
Thr	Gly	His	Glu	Leu	Leu	Ser	Glu	Leu	Gln	Gln	Arg	Arg	Phe	Asn	Gly
		35					40					45			
Ser	Asp	Gly	Gly	Val	Ser	Trp	Ser	Pro	Met	Asp	Asp	Glu	Leu	Leu	Ala
	50					55				60					
Gln	Pro	Gln	Val	Met	Lys	Leu	Leu	Asp	Ser	Leu	Arg	Glu	Gln	Tyr	Thr
65				70					75					80	
Arg	Tyr	Gln	Glu	Val	Cys	Arg	Gln	Arg	Ser	Lys	Arg	Thr	Gln	Leu	Glu
			85						90					95	
Glu	Ile	Gln	Gln	Lys	Val	Met	Gln	Val	Val	Asn	Trp	Leu	Glu	Gly	Pro
			100				105						110		
Gly	Ser	Glu	Gln	Leu	Arg	Ala	Gln	Trp	Gly	Ile	Gly	Asp	Ser	Ile	Arg
		115					120					125			
Ala	Ser	Gln	Ala	Leu	Gln	Gln	Lys	His	Glu	Glu	Ile	Glu	Ser	Gln	His

130	135	140
Ser Glu Trp Phe Ala Val Tyr Val Glu Leu Asn Gln Gln Ile Ala Ala		
145	150	155
Leu Leu Asn Ala Gly Asp Glu Glu Asp Leu Val Glu Leu Lys Ser Leu		160
	165	170
Gln Gln Gln Leu Ser Asp Val Cys Tyr Arg Gln Ala Ser Gln Leu Glu		175
	180	185
Phe Arg Gln Asn Leu Leu Gln Ala Ala Leu Glu Phe His Gly Val Ala		190
	195	200
Gln Asp Leu Ser Gln Gln Leu Asp Gly Leu Leu Gly Met Leu Cys Val		205
	210	215
Asp Val Ala Pro Ala Asp Gly Ala Ser Ile Gln Gln Thr Leu Lys Leu		220
225	230	235
Leu Glu Glu Lys Leu Lys Ser Val Asp Val Gly Leu Gln Gly Leu Arg		240
	245	250
Glu Lys Gly Gln Gly Leu Leu Asp Gln Ile Ser Asn Gln Ala Ser Xaa		255
	260	265
Gly Pro Met Glu Arg Met Xaa Thr Ile Glu Asn Lys Glu Asn Val Asp		270
	275	280
His Ile Gln Gly Val Met Glu Asp Met Gln Leu Arg Lys Gln Arg Cys		285
	290	295
Glu Asp Met Val Asp Val Arg Arg Leu Lys Met Leu Gln Met Val Gln		300
305	310	315
Leu Phe Lys Cys Glu Glu Asp Ala Ala Lys Ala Val Glu Trp Leu Ser		320
	325	330
Glu Leu Leu Asp Ala Leu Leu Lys Thr His Ile Arg Leu Gly Asp Asp		335
	340	345
Ala Gln Glu Thr Lys Val Leu Leu Glu Lys His Arg Lys Phe Val Asp		350
	355	360
Val Ala Gln Ser Thr Tyr Asp Tyr Gly Arg Gln Leu Leu Gln Ala Thr		365
	370	375
Val Val Leu Cys Gln Ser Leu Arg Cys Thr Ser Arg Ser Ser Gly Asp		380
385	390	395
Thr Leu Pro Arg Leu Asn Arg Val Trp Lys Gln Phe Thr Ile Ala Ser		400
	405	410
Glu Glu Arg Val His Arg Leu Glu Met Ala Ile Ala Phe His Ser Asn		415
	420	425
Ala Glu Lys Ile Leu Gln Asp Cys Pro Glu Glu Pro Glu Ala Ile Asn		430
	435	440
Asp Glu Glu Gln Phe Asp Glu Ile Glu Ala Val Gly Lys Ser Leu Leu		445
	450	455
Asp Arg Leu Thr Val Pro Val Val Tyr Pro Asp Gly Thr Glu Gln Tyr		460
465	470	475
Phe Gly Ser Pro Ser Asp Met Ala Ser Thr Ala Glu Asn Ile Arg Asp		480
	485	490
Arg Met Lys Leu Val Asn Leu Lys Arg Gln Gln Leu Arg His Pro Glu		495
	500	505
Met Val Thr Thr Glu Ser		510
515		

<210> 6053

<211> 3257

<212> DNA

<213> Homo sapiens

<400> 6053
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120
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180
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240
cagcggcagg aatagcaggc aacgtgattt caaagctggg ctacgcctct gtttcttctc
300
tcgtgtaatc gcaaaaccca ttttgagaca ggaattccaa tcattgtctgt gatggtggtg
360
agaaagaagg tgacacggaa atgggagaaa ctcccaggca ggaacacctt ttgctgtgat
420
ggccgcgtca tgatggcccc gcaaaagggc attttctacc tgaccctttt cctcatcctg
480
gggacatgta cactcttctt cgcttttgag tgcgctacc tggctgttca gctgtctcct
540
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600
agcttcagt accctggagt gattcctcgg gcgctaccag atgaagcagc tttcatagaa
660
atggagatag aagctacca tgggtgcggtg ccccagggcc agagaccacc gcctcgtatc
720
aagaatttcc agataaaca ccagattgtg aaactgaaat actgttacac atgcaagatc
780
ttccggcctc cccgggcctc ccattgcagc atctgtgaca actgtgtgga gcgcttcgac
840
catcactgcc cctgggtggg gaattgtgtt ggaaagagga actaccgcta cttctacctc
900
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960
gccctcaaat ctttgaaaat tggcttcttg gagacattga aagaaactcc tggaaactgtt
1020
ctagaagtcc tcatttgctt ctttacactc tggctcgtcg tgggactgac tggatttcat
1080
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<211> 382

<212> PRT

<213> Homo sapiens

<400> 6054

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<211> 285

<212> PRT

<213> Homo sapiens

<400> 6056

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<211> 3924

<212> DNA

<213> Homo sapiens

<400> 6057

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<211> 500

<212> PRT

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<210> 6059

<211> 1442

<212> DNA

<213> Homo sapiens

<400> 6059

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<210> 6060

<211> 313

<212> PRT

<213> Homo sapiens

<400> 6060

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Cys	Val	Ala	His	Leu	Ile	Ile	Phe	Leu	Ala	Leu	Gly	Ala	Thr	Glu	Cys
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<210> 6061

<211> 1582

<212> DNA

<213> Homo sapiens

<400> 6061

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<211> 226

<212> PRT

<213> Homo sapiens

<400> 6062

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	50					55					60				
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			85					90					95		
Ile	Leu	Lys	Ile	Cys	His	Thr	Leu	Thr	Glu	Lys	Leu	Val	Ala	Met	Thr
		100					105					110			
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		115					120					125			
Ile	Val	Val	Ala	Lys	Arg	Ile	Ser	Pro	Arg	Val	Asp	Asp	Val	Val	Lys
	130					135					140				
Ser	Met	Tyr	Pro	Pro	Leu	Asp	Pro	Lys	Leu	Leu	Asp	Ala	Arg	Thr	Thr
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<210> 6063

<211> 2286

<212> DNA

<213> Homo sapiens

<400> 6063

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<210> 6064

<211> 233

<212> PRT

<213> Homo sapiens

<400> 6064

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Glu	Glu	Tyr	Thr	Thr	Gly	Met	Ala	Asp	Cys	Ile	Leu	Val	Asn	Ser	Gln
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Phe	Thr	Ala	Ala	Val	Phe	Lys	Glu	Thr	Phe	Lys	Ser	Leu	Ser	His	Ile
		195					200					205			
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<210> 6065

<211> 2084

<212> DNA

<213> Homo sapiens

<400> 6065

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<210> 6066

<211> 80

<212> PRT

<213> Homo sapiens

<400> 6066

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		20						25					30		
Ala	Ile	Asp	Lys	Pro	Thr	Tyr	Ala	Thr	Lys	Trp	Pro	Ile	Arg	His	Gly
		35					40						45		
Ile	Ile	Glu	Asp	Trp	Asp	Leu	Met	Glu	Arg	Phe	Met	Glu	Gln	Val	Val
	50					55					60				
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<210> 6067

<211> 406

<212> DNA

<213> Homo sapiens

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<211> 117

<212> PRT

<213> Homo sapiens

<400> 6068

Met	Tyr	Ser	Gly	Gln	Cys	Pro	Ala	Cys	Ser	Val	Ser	Trp	Lys	Ser	Val
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Ser	Cys	Cys	Asp	Tyr	Tyr	Ser	Pro	Phe	Ser	Thr	Leu	Ile	Ile	Pro	Arg
			20					25					30		
Ser	Leu	Phe	Leu	Ser	Gly	Asn	Val	Ser	Ser	Arg	Arg	Met	Arg	Thr	Ala
			35				40					45			
Ser	Arg	Ser	Ser	Glu	Pro	Pro	Ala	Cys	Pro	Arg	His	Trp	Pro	Cys	Pro
			50				55				60				
Pro	Gly	Leu	Pro	Phe	Gly	Gln	Gly	Ala	Val	Ala	Arg	Ala	Ala	Pro	Cys
65					70				75					80	
Pro	Ala	Tyr	Ser	His	Ser	Ala	Val	Gly	Arg	Pro	Pro	Leu	Pro	Arg	Lys
				85					90					95	
Arg	Gly	Ala	Val	Ser	Ser	Gly	Arg	Leu	His	Arg	Arg	Gly	Thr	Gly	Ala
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Met	Trp	Trp	Glu	Gly											
			115												

<210> 6069

<211> 456

<212> DNA

<213> Homo sapiens

<400> 6069

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 120
 ctggagtact gtatcatggt cattgggggtc cccaacgtgg gcaagtcctc cctcatcaac
 180

tcctccgga ggcagcacct caggaaaggg aaagccacca ggggggtgg cgagcctggg
240
atcaccagag ctgtgatgtc caaaattcag gtggagtctt caggggccag gccacgact
300
ctgtcaagag ctctgcaggc gtctggcacc tgccgacctc tgtgtggctt ccggtgtgtg
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<210> 6070

<211> 148

<212> PRT

<213> Homo sapiens

<400> 6070

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		20					25						30		
His	Arg	Tyr	His	Arg	Lys	Glu	Asn	Leu	Glu	Tyr	Cys	Ile	Met	Val	Ile
		35				40					45				
Gly	Val	Pro	Asn	Val	Gly	Lys	Ser	Ser	Leu	Ile	Asn	Ser	Leu	Arg	Arg
	50					55					60				
Gln	His	Leu	Arg	Lys	Gly	Lys	Ala	Thr	Arg	Val	Gly	Gly	Glu	Pro	Gly
65					70				75					80	
Ile	Thr	Arg	Ala	Val	Met	Ser	Lys	Ile	Gln	Val	Glu	Ser	Ser	Gly	Ala
			85						90					95	
Arg	Pro	Ser	Thr	Leu	Ser	Arg	Ala	Leu	Gln	Ala	Ser	Gly	Thr	Cys	Arg
		100					105					110			
Pro	Leu	Cys	Gly	Phe	Arg	Leu	Leu	Thr	Thr	Leu	Pro	Ser	Pro	Pro	Leu
	115					120					125				
Ser	Val	Pro	Ala	Glu	His	Pro	Arg	Gly	Arg	His	Cys	Pro	Ala	Leu	Ile
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Pro	Gln	Ser	Ser												
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<210> 6071

<211> 2633

<212> DNA

<213> Homo sapiens

<400> 6071

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120
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180
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240
ctggcatgct caaggaatgg gctattaagc aaggatcct gttaaaagtg gctgaaacca
300

tcaaaagtgtg gatttttttt tctcagtgc ataagaaaga tgacttactt cacaagtgtg
360
atattggatt ccgactcgac tcattacata ccatacctgca acaggaagtc ctgttacaag
420
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480
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720
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1560
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1680
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1920

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 1980
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 2040
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 2100
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<210> 6072

<211> 76

<212> PRT

<213> Homo sapiens

<400> 6072

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 20 25 30
 Pro Thr Trp Arg Asn Pro Ile Ser Thr Lys Asn Thr Lys Ile Asn Lys
 35 40 45
 Ala Trp Trp Arg Val Pro Val Val Pro Ala Thr Arg Glu Ala Glu Ala
 50 55 60
 Gly Glu Ser Leu Glu Pro Gly Arg Arg Arg Phe Gln
 65 70 75

<210> 6073

<211> 387

<212> DNA

<213> Homo sapiens

<400> 6073

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<210> 6074

<211> 69

<212> PRT

<213> Homo sapiens

<400> 6074

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Arg	Gly	Leu	Cys	Thr	Ala	Ser	Phe	Pro	Pro	His	Leu	Ser	Pro	Ala	Arg
		20						25				30			
Ala	Pro	Thr	Gly	Pro	Phe	Ser	Pro	Arg	Met	Lys	Pro	Ala	Gly	Ser	Val
		35					40					45			
Asn	Asp	Met	Ala	Leu	Asp	Ala	Phe	Asp	Leu	Asp	Arg	Met	Lys	Gln	Glu
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Ile	Leu	Glu	Glu	Val											
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<210> 6075

<211> 4668

<212> DNA

<213> Homo sapiens

<400> 6075

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 240
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 300
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 540
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 660

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720
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2280

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<210> 6076

<211> 601

<212> PRT

<213> Homo sapiens

<400> 6076

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Glu	Asp	Arg	Ile	Gln	Leu	Trp	Lys	Pro	Pro	Tyr	Thr	Glu	Glu	Asn	Lys
			20					25					30		
Glu	Val	Gly	Leu	Ala	Leu	Lys	Asp	Leu	Ala	Lys	Gln	Tyr	Ser	Asp	Arg
		35					40					45			
Leu	Glu	Cys	Cys	Glu	Asn	Glu	Val	Glu	Lys	Val	Ile	Glu	Glu	Ile	Arg
		50				55					60				
Cys	Lys	Ala	Ile	Glu	Arg	Gly	Thr	Gly	Asn	Asp	Asn	Tyr	Arg	Thr	Thr
65				70					75					80	
Gly	Ile	Ala	Thr	Ile	Glu	Val	Phe	Leu	Pro	Pro	Arg	Leu	Lys	Lys	Asp
			85					90					95		
Arg	Lys	Asn	Leu	Leu	Glu	Thr	Arg	Leu	His	Ile	Thr	Gly	Arg	Glu	Leu
		100						105				110			
Arg	Ser	Lys	Ile	Ala	Glu	Thr	Phe	Gly	Leu	Gln	Glu	Asn	Tyr	Ile	Lys
		115					120				125				
Ile	Val	Ile	Asn	Lys	Lys	Gln	Leu	Gln	Leu	Gly	Lys	Thr	Leu	Glu	Glu
		130				135				140					
Gln	Gly	Val	Ala	His	Asn	Val	Lys	Ala	Met	Val	Leu	Glu	Leu	Lys	Gln
145				150					155					160	
Ser	Glu	Glu	Asp	Ala	Arg	Lys	Asn	Phe	Gln	Leu	Glu	Glu	Glu	Glu	Gln

				165					170					175	
Asn	Glu	Ala	Lys	Leu	Lys	Glu	Lys	Gln	Ile	Gln	Arg	Thr	Lys	Arg	Gly
				180					185					190	
Leu	Glu	Ile	Leu	Ala	Lys	Arg	Ala	Ala	Glu	Thr	Val	Val	Asp	Pro	Glu
				195					200					205	
Met	Thr	Pro	Tyr	Leu	Asp	Ile	Ala	Asn	Gln	Thr	Gly	Arg	Ser	Ile	Arg
				210					215					220	
Ile	Pro	Pro	Ser	Glu	Arg	Lys	Ala	Leu	Met	Leu	Ala	Met	Gly	Tyr	His
				225										235	240
Glu	Lys	Gly	Arg	Ala	Phe	Leu	Lys	Arg	Lys	Glu	Tyr	Gly	Ile	Ala	Leu
				245						250				255	
Pro	Cys	Leu	Leu	Asp	Ala	Asp	Lys	Tyr	Phe	Cys	Glu	Cys	Cys	Arg	Glu
				260					265					270	
Leu	Leu	Asp	Thr	Val	Asp	Asn	Tyr	Ala	Val	Leu	Gln	Leu	Asp	Ile	Val
				275					280					285	
Trp	Cys	Tyr	Phe	Arg	Leu	Glu	Gln	Leu	Glu	Cys	Leu	Asp	Asp	Ala	Glu
				290					295					300	
Lys	Lys	Leu	Asn	Leu	Ala	Gln	Lys	Cys	Phe	Lys	Asn	Cys	Tyr	Gly	Glu
				305										315	320
Asn	His	Gln	Arg	Leu	Val	His	Ile	Lys	Gly	Asn	Cys	Gly	Lys	Glu	Lys
				325						330				335	
Val	Leu	Phe	Leu	Arg	Leu	Tyr	Leu	Leu	Gln	Gly	Ile	Arg	Asn	Tyr	His
				340					345					350	
Ser	Gly	Asn	Asp	Val	Glu	Ala	Tyr	Glu	Tyr	Leu	Asn	Arg	His	Val	Ser
				355					360					365	
Ser	Leu	Lys	Ser	Tyr	Ile	Leu	Ile	His	Gln	Lys	Trp	Thr	Ile	Cys	Cys
				370					375					380	
Ser	Trp	Gly	Leu	Leu	Pro	Arg	Lys	Xaa	Arg	Leu	Gly	Leu	Arg	Ala	Cys
				385					390					395	400
Asp	Gly	Asn	Val	Asp	His	Ala	Ala	Thr	His	Ile	Thr	Asn	Arg	Arg	Glu
				405					410					415	
Glu	Leu	Ala	Gln	Ile	Arg	Lys	Glu	Glu	Lys	Glu	Lys	Lys	Arg	Arg	Arg
				420					425					430	
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Ala	Gln	Gln	Ile	Leu	Leu	Ser	Asn	Pro	Gln	Met	Trp	Trp	Leu	Asn	Asp
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Ser	Asn	Pro	Glu	Thr	Asp	Asn	Arg	Gln	Glu	Ser	Pro	Ser	Gln	Glu	Asn
				465					470					475	480
Ile	Asp	Arg	Leu	Val	Tyr	Met	Gly	Phe	Asp	Ala	Leu	Val	Ala	Glu	Ala
				485					490					495	
Ala	Leu	Arg	Val	Phe	Arg	Gly	Asn	Val	Gln	Leu	Ala	Ala	Gln	Thr	Leu
				500					505					510	
Ala	His	Asn	Gly	Gly	Ser	Leu	Pro	Pro	Glu	Leu	Pro	Leu	Ser	Pro	Glu
				515					520					525	
Asp	Ser	Leu	Ser	Pro	Pro	Ala	Thr	Ser	Pro	Ser	Asp	Ser	Ala	Gly	Thr
				530					535					540	
Ser	Ser	Ala	Ser	Thr	Asp	Glu	Asp	Met	Glu	Thr	Glu	Ala	Val	Asn	Glu
				545					550					555	560
Ile	Leu	Glu	Asp	Ile	Pro	Glu	His	Glu	Glu	Asp	Tyr	Leu	Asp	Ser	Thr
				565					570					575	
Leu	Glu	Asp	Glu	Glu	Ile	Ile	Ile	Ala	Glu	Tyr	Leu	Ser	Tyr	Val	Glu
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595

600

<210> 6077

<211> 2093

<212> DNA

<213> Homo sapiens

<400> 6077

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120
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180
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240
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300
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360
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420
aatgaagacc attgggagca gactctgccca ggatcgtctg atgaggaaat atctgatgag
480
gaagggctctg gagatgaaga ttcagaggga ctgggtctgg aggaatatga tgaggacgac
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720
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1380

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 1980
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 2093

<210> 6078

<211> 213

<212> PRT

<213> Homo sapiens

<400> 6078

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			20					25					30		
Ser	Gly	Arg	Glu	Gly	Ala	Ser	Gly	Pro	Gly	Val	Gly	Pro	His	Ile	Tyr
			35				40					45			
Val	Arg	Glu	Ala	Glu	Asp	Arg	Glu	Leu	Val	Thr	Met	Ala	Gly	Pro	Gln
	50				55				60						
Pro	Leu	Ala	Leu	Gln	Leu	Glu	Gln	Leu	Leu	Asn	Pro	Arg	Pro	Ser	Glu
65				70					75					80	
Ala	Asp	Pro	Glu	Ala	Asp	Pro	Glu	Glu	Ala	Thr	Ala	Ala	Arg	Val	Ile
			85					90					95		
Asp	Arg	Phe	Asp	Glu	Gly	Glu	Asp	Gly	Glu	Gly	Asp	Phe	Leu	Val	Val
			100				105					110			
Gly	Ser	Ile	Arg	Lys	Leu	Ala	Ser	Ala	Ser	Leu	Leu	Asp	Thr	Asp	Lys
			115				120					125			
Arg	Tyr	Cys	Gly	Lys	Thr	Thr	Ser	Arg	Lys	Ala	Trp	Asn	Glu	Asp	His
	130						135				140				
Trp	Glu	Gln	Thr	Leu	Pro	Gly	Ser	Ser	Asp	Glu	Glu	Ile	Ser	Asp	Glu
145				150					155					160	
Glu	Gly	Ser	Gly	Asp	Glu	Asp	Ser	Glu	Gly	Leu	Gly	Leu	Glu	Glu	Tyr
			165					170				175			
Asp	Glu	Asp	Asp	Leu	Gly	Ala	Ala	Glu	Glu	Gln	Glu	Cys	Gly	Asp	Gln

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 Gly Glu Gln Glu Asp Glu Lys Pro Leu Cys Lys Asn Thr Gly Leu Gln
 195 200 205
 Cys Pro Glu Tyr Gln
 210

<210> 6079

<211> 651

<212> DNA

<213> Homo sapiens

<400> 6079

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 120
 catgcgcgagc ggggccgtgg gtgtacgcgg cgcagcgagg cagtcctgat ggcccggcat
 180
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 240
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 300
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 360
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 420
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 480
 agaaacaaag ccaccagcc aatgaagtct gtactctggt ggcttcagt ggaaaaggca
 540
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<210> 6080

<211> 162

<212> PRT

<213> Homo sapiens

<400> 6080

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 20 25 30
 Gln Leu Gln Gly Gly Arg Phe Leu Met Gly Thr Asn Ser Pro Asp Ser
 35 40 45
 Arg Asp Gly Glu Gly Pro Val Arg Glu Ala Thr Val Lys Pro Phe Ala
 50 55 60
 Ile Asp Ile Phe Pro Val Thr Asn Lys Asp Phe Arg Asp Phe Val Arg
 65 70 75 80
 Glu Lys Lys Tyr Arg Thr Glu Ala Glu Met Phe Gly Trp Ser Phe Val
 85 90 95
 Phe Glu Asp Phe Val Ser Asp Glu Leu Arg Asn Lys Ala Thr Gln Pro

	100		105		110
Met	Lys Ser Val Leu Trp Trp	Leu Pro Val Glu Lys	Ala Phe Trp Arg		
	115	120	125		
Gln	Pro Ala Gly Pro Gly Ser Gly	Ile Arg Glu Arg	Leu Glu His Pro		
	130	135	140		
Val	Leu His Val Ser Trp Asn Asp	Ala Arg Ala Tyr	Cys Ala Trp Arg		
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Gly	Lys				

<210> 6081

<211> 655

<212> DNA

<213> Homo sapiens

<400> 6081

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120
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240
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300
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420
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480
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540
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655

<210> 6082

<211> 218

<212> PRT

<213> Homo sapiens

<400> 6082

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Ala	Glu	Thr	Asp	Glu	Gly	Trp	Leu	Asp	Val	Val	Gln	Ser	Leu	Ile	Arg
			20					25					30		
Val	Ile	Pro	Leu	Glu	Asp	Pro	Leu	Gly	Pro	Ala	Val	Ile	Thr	Leu	Leu
			35				40					45			
Leu	Asp	Glu	Cys	Pro	Leu	Pro	Thr	Lys	Asp	Ala	Leu	Gln	Lys	Leu	Thr
		50				55					60				
Glu	Ile	Leu	Asn	Leu	Asn	Gly	Glu	Val	Ala	Cys	Gln	Asp	Ser	Ser	His

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65          70          75          80
Pro Ala Lys His Arg Asn Thr Ser Ala Val Leu Gly Cys Leu Ala Glu
          85          90          95
Lys Leu Ala Gly Pro Ala Ser Ile Gly Leu Leu Ser Pro Gly Ile Leu
          100          105          110
Glu Tyr Leu Leu Gln Cys Leu Lys Leu Gln Ser His Pro Thr Val Met
          115          120          125
Leu Phe Ala Leu Ile Ala Leu Glu Lys Phe Ala Gln Thr Ser Glu Asn
          130          135          140
Lys Leu Thr Ile Ser Glu Ser Ser Ile Ser Asp Arg Leu Val Thr Leu
145          150          155          160
Glu Ser Trp Ala Asn Asp Pro Asp Tyr Leu Lys Arg Gln Val Gly Phe
          165          170          175
Cys Ala Gln Trp Ser Leu Asp Asn Leu Phe Leu Lys Glu Gly Arg Gln
          180          185          190
Leu Thr Tyr Glu Lys Val Asn Leu Ser Ser Ile Arg Ala Met Leu Asn
          195          200          205
Ser Asn Asp Val Ser Glu Tyr Leu Lys Ile
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<210> 6083

<211> 358

<212> DNA

<213> Homo sapiens

<400> 6083

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120
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180
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240
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358

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<210> 6084

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6084

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          20          25          30
Leu Ile Val Glu Gly His Leu Thr Lys Ala Val Glu Glu Thr Lys Leu
          35          40          45
Ser Lys Glu Asn Gln Thr Arg Ala Lys Glu Ser Asp Phe Ser Asp Thr
          50          55          60
Leu Ser Pro Ser Lys Glu Lys Ser Ser Asp Asp Thr Thr Asp Ala Gln

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65		70		75		80									
Met	Asp	Glu	Gln	Asp	Leu	Asn	Glu	Pro	Leu	Ala	Lys	Val	Ser	Leu	Leu
		85				90								95	
Lys	Asp	Asp	Leu	Gln											
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<210> 6085

<211> 2307

<212> DNA

<213> Homo sapiens

<400> 6085

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240
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480
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600
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660
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1260

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<210> 6086

<211> 84

<212> PRT

<213> Homo sapiens

<400> 6086

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Arg	Gly	Ala	Ser	Leu	Cys	Val	Phe	Val	Cys	Val	Cys	Leu	Cys	Val	Arg
			20					25				30			
Ile	Thr	Leu	Gly	Val	Gln	Ala	Ser	Gly	Cys	Val	Cys	Val	Cys	Ala	Cys
		35				40					45				
Val	Cys	Val	Cys	Val	Ser	Val	Cys	Val	Cys	Val	Cys	Val	His	Thr	Gly
	50				55				60						
Gln	Pro	Pro	Tyr	Leu	Pro	Arg	Phe	Ser	Thr	Ala	Tyr	Leu	Phe	Gln	Trp
65				70				75				80			
Asp	Ser	Thr	Val												

<210> 6087
<211> 1506
<212> DNA
<213> Homo sapiens

<400> 6087
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<210> 6088

<211> 326

<212> PRT

<213> Homo sapiens

<400> 6088

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		20					25						30		
Pro	Gly	Asp	Leu	Leu	Ser	Ala	Arg	Leu	Leu	Ser	Gln	Glu	Lys	Arg	Ala
		35					40					45			
Ala	Glu	Thr	His	Phe	Gly	Phe	Glu	Thr	Val	Ser	Glu	Glu	Glu	Lys	Gly
		50				55					60				
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Met	Asn	Asp	Met	Met	Ser	Leu	Gly	Ile	His	Arg	Val	Trp	Lys	Asp	Leu
			85					90						95	
Leu	Leu	Trp	Lys	Met	His	Pro	Leu	Pro	Gly	Thr	Gln	Leu	Leu	Asp	Met
			100					105						110	
Ala	Gly	Gly	Thr	Gly	Asp	Ile	Ala	Phe	Arg	Phe	Leu	Asn	Tyr	Val	Gln
			115				120					125			
Ser	Gln	His	Gln	Arg	Lys	Gln	Lys	Arg	Gln	Leu	Arg	Ala	Gln	Gln	Asn
			130				135					140			
Leu	Ser	Trp	Glu	Glu	Ile	Ala	Lys	Glu	Tyr	Gln	Asn	Glu	Glu	Asp	Ser
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Leu	Gly	Gly	Ser	Arg	Val	Val	Val	Cys	Asp	Ile	Asn	Lys	Glu	Met	Leu
			165					170						175	
Lys	Val	Gly	Lys	Gln	Lys	Ala	Leu	Ala	Gln	Gly	Tyr	Arg	Ala	Gly	Leu
			180					185						190	
Ala	Trp	Val	Leu	Gly	Asp	Ala	Glu	Glu	Leu	Pro	Phe	Asp	Asp	Asp	Lys
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Phe	Leu	Cys	Leu	Glu	Phe	Ser	Gln	Val	Asn	Asn	Pro	Leu	Ile	Ser	Arg
			245						250					255	
Leu	Tyr	Asp	Leu	Tyr	Ser	Phe	Gln	Val	Ile	Pro	Val	Leu	Gly	Glu	Val
			260					265						270	
Ile	Ala	Gly	Asp	Trp	Lys	Ser	Tyr	Gln	Tyr	Leu	Val	Glu	Ser	Ile	Arg
			275					280						285	
Arg	Phe	Pro	Ser	Gln	Glu	Glu	Phe	Lys	Asp	Met	Ile	Glu	Asp	Ala	Gly
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Phe	His	Lys	Val	Thr	Tyr	Glu	Ser	Leu	Thr	Ser	Gly	Ile	Val	Ala	Ile
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325

<210> 6089

<211> 4211

<212> DNA

<213> Homo sapiens

<400> 6089

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<210> 6090

<211> 839

<212> PRT

<213> Homo sapiens

<400> 6090

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			20					25					30		
Glu	Asp	Cys	Thr	Trp	Met	Gln	Glu	Tyr	Asn	Pro	Pro	Thr	Phe	Glu	Thr

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Arg Glu Ala Leu Ser Gln Leu Arg Val Leu Cys Cys Glu Trp Leu Arg		
65	70	75
Pro Glu Leu His Thr Lys Glu Gln Ile Leu Glu Leu Leu Val Leu Glu		
85	90	95
Gln Phe Leu Thr Ile Leu Pro Glu Glu Phe Gln Pro Trp Val Arg Glu		
100	105	110
His His Pro Glu Ser Gly Glu Glu Ala Val Ala Val Ile Glu Asn Ile		
115	120	125
Gln Arg Glu Leu Glu Glu Arg Arg Gln Gln Ile Val Ala Cys Pro Asp		
130	135	140
Val Leu Pro Arg Lys Met Ala Thr Pro Gly Ala Val Gln Glu Ser Cys		
145	150	155
Ser Pro His Pro Leu Thr Val Asp Thr Gln Pro Glu Gln Ala Pro Gln		
165	170	175
Lys Pro Arg Leu Leu Glu Glu Asn Ala Leu Pro Val Leu Gln Val Pro		
180	185	190
Ser Leu Pro Leu Lys Asp Ser Gln Glu Leu Thr Ala Ser Leu Leu Ser		
195	200	205
Thr Gly Ser Gln Lys Leu Val Lys Ile Glu Glu Val Ala Asp Val Ala		
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Val Ser Phe Ile Leu Glu Glu Trp Gly His Leu Asp Gln Ser Gln Lys		
225	230	235
Ser Leu Tyr Arg Asp Asp Arg Lys Glu Asn Tyr Gly Ser Ile Thr Ser		
245	250	255
Met Gly Tyr Glu Ser Arg Asp Asn Met Glu Leu Ile Val Lys Gln Ile		
260	265	270
Ser Asp Asp Ser Glu Ser His Trp Val Ala Pro Glu His Thr Glu Arg		
275	280	285
Ser Val Pro Gln Asp Pro Asp Phe Ala Glu Val Ser Asp Leu Lys Gly		
290	295	300
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Asn Pro Ser Gln Lys Arg Asp Leu Asp Ala Ile Thr Asp Ile Ser Pro		
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Lys Phe Phe Leu Gln Ala Ser Asn Phe Ile Gln His Arg Arg Ile His		
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Pro Tyr Lys Cys Gln Val Cys Gly Lys Ala Phe Arg Val Ser Ser His		
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Asn Glu Cys Gly Lys Asn Phe Gly Arg His Ser His Leu Ile Glu His		
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Ser Lys Asn Thr Lys Leu Ser Val Lys Lys Lys Ile Ser Glu Tyr Ser		


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Lys Gln Gly Ile Pro Met Lys Glu Ile Leu Gly Gln Pro Ser Ser Lys
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Arg Met Asn Tyr Ser Glu Val Pro Tyr Val His Lys Lys Ser Ser Thr
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Gly Glu Arg Pro His Lys Cys Asn Glu Cys Gly Lys Ser Phe Ile Gln
545          550          555          560
Ser Ala His Leu Ile Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
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Phe Arg Cys Glu Glu Cys Gly Lys Ser Tyr Asn Gln Arg Val His Leu
          580          585          590
Thr Gln His Gln Arg Val His Thr Gly Glu Lys Pro Tyr Thr Cys Pro
          595          600          605
Leu Cys Gly Lys Ala Phe Arg Val Arg Ser His Leu Val Gln His Gln
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Ser Val His Ser Gly Glu Arg Pro Phe Lys Cys Asn Glu Cys Gly Lys
625          630          635          640
Gly Phe Gly Arg Arg Ser His Leu Ala Gly His Leu Arg Leu His Ser
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Arg Glu Lys Ser His Gln Cys Arg Glu Cys Gly Glu Ile Phe Phe Gln
          660          665          670
Tyr Val Ser Leu Ile Glu His Gln Val Leu His Met Gly Gln Lys Asn
          675          680          685
Glu Lys Asn Gly Ile Cys Glu Glu Ala Tyr Ser Trp Asn Leu Thr Val
690          695          700
Ile Glu Asp Lys Lys Ile Glu Leu Gln Glu Gln Pro Tyr Gln Cys Asp
705          710          715          720
Ile Cys Gly Lys Ala Phe Gly Tyr Ser Ser Asp Leu Ile Gln His Tyr
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Arg Thr His Thr Ala Glu Lys Pro Tyr Gln Cys Asp Ile Cys Arg Glu
          740          745          750
Asn Val Gly Gln Cys Ser His Thr Lys Gln His Gln Lys Ile Tyr Ser
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Ser Thr Lys Ser His Gln Cys His Glu Cys Gly Arg Gly Phe Thr Leu
770          775          780
Lys Ser His Leu Asn Gln His Gln Arg Ile His Thr Gly Glu Lys Pro
785          790          795          800
Phe Gln Cys Lys Glu Cys Gly Met Asn Phe Ser Trp Ser Cys Ser Leu
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Phe Lys His Leu Arg Ser His Glu Arg Thr Asp Pro Ile Asn Thr Leu
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<210> 6091

<211> 1336

<212> DNA

<213> Homo sapiens

<400> 6091

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<210> 6092

<211> 118

<212> PRT

<213> Homo sapiens

<400> 6092

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Thr Pro Asn Trp Tyr Trp Val Leu Gly His Pro Asn Leu Ile Arg Asp			
35	40	45	
Val Thr Arg Gln Val Pro Ser Pro Pro Ser Gly Phe Arg Leu Pro Ser			
50	55	60	
Ser Arg His Glu Gly Pro Ser Pro Pro Arg Asp Leu Gly Thr Ser Gly			
65	70	75	80
Pro Ser Arg Ala Ala Ser His Lys Pro Ser Asn Glu Gln Arg Asp Ala			
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Gly Gln Gln Leu Gln Leu His Leu Leu Pro Ala Leu Lys Gly Ser Phe			
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<210> 6093

<211> 1998

<212> DNA

<213> Homo sapiens

<400> 6093

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<210> 6094

<211> 136

<212> PRT

<213> Homo sapiens

<400> 6094

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		20					25					30			
Thr	Gly	Pro	Val	Ser	Gln	Ser	Phe	Leu	Gln	Met	Leu	Ile	Gly	Val	Cys
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Trp	Asn	Pro	Lys	Pro	Leu	Pro	Arg	Leu	Gln	Ala	Pro	Asp	Gly	Leu	Leu
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Ser	Cys	Asn	Phe	Leu	Gly	Glu	Glu	Thr	Phe	Ser	Ser	Phe	Pro	Phe	Leu
65				70				75					80		
Val	His	Pro	Cys	Thr	Leu	Val	Leu	Ser	Gln	Pro	Leu	Pro	His	Ile	Val

	85		90		95										
Pro	Asp	Ser	Arg	Gly	Thr	Ser	Ser	Leu	His	Arg	Ala	Ala	Ala	Ala	Gly
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Leu	Arg	Ala	Glu	Pro	Val	Gly	Ala	Glu	Ala	Leu	Ala	Pro	Glu	Val	Gln
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<210> 6095

<211> 441

<212> DNA

<213> Homo sapiens

<400> 6095

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<210> 6096

<211> 97

<212> PRT

<213> Homo sapiens

<400> 6096

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Ser	Gly	Ser	Ser	Gly	Ser	Lys	Ser	Gly	Gly	Asp	Lys	Met	Phe	Ser	Leu
		20						25					30		

Lys	Lys	Trp	Asn	Ala	Val	Ala	Met	Trp	Ser	Trp	Asp	Val	Glu	Cys	Asp
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Thr	Cys	Ala	Ile	Cys	Arg	Val	Gln	Val	Met	Val	Val	Trp	Gly	Glu	Cys
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Asn	His	Ser	Phe	His	Asn	Cys	Cys	Met	Ser	Leu	Trp	Val	Lys	Gln	Asn
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<211> 2404

<212> DNA

<213> Homo sapiens

<400> 6097

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<211> 631

<212> PRT

<213> Homo sapiens

<400> 6098

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<211> 1102

<212> PRT

<213> Homo sapiens

<400> 6100

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5284

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<212> DNA

<213> Homo sapiens

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<211> 123

<212> PRT

<213> Homo sapiens

<400> 6102

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<212> DNA

<213> Homo sapiens

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<210> 6104

<211> 71

<212> PRT

<213> Homo sapiens

<400> 6104

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			20					25					30		
Leu	Asn	Arg	Leu	Gln	Tyr	Ala	Val	Ile	Ser	Glu	Ala	Trp	Arg	Leu	Val
	35						40					45			
Glu	Glu	Glu	Ile	Val	Ser	Pro	Ser	Asp	Leu	Asp	Leu	Val	Met	Ser	Asp
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<210> 6105

<211> 1846

<212> DNA

<213> Homo sapiens

<400> 6105

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1846

<210> 6106

<211> 405

<212> PRT

<213> Homo sapiens

<400> 6106

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 20          25          30
Asn Ser Thr Gln Pro Ser Thr Ala Gly Met Lys Trp Cys Leu Pro Phe
 35          40          45
His Leu Leu Cys Arg Gly Pro Ser Gly Ser Leu Ser Ala Pro Pro Ala
 50          55          60
Ala Ser Val Ile Ser Ala Pro Pro Ser Ser Ser Ser Arg His Arg Lys
 65          70          75          80
Arg Arg Arg Thr Ser Ser Lys Ser Glu Ala Gly Ala Arg Gly Gly Gly
 85          90          95
Gln Gly Ser Lys Glu Lys Gly Arg Gly Ser Trp Gly Gly Arg His His
100          105          110
His His His Pro Leu Pro Ala Ala Gly Phe Lys Lys Gln Gln Arg Lys
115          120          125
Phe Gln Tyr Gly Asn Tyr Cys Lys Tyr Tyr Gly Tyr Arg Asn Pro Ser
130          135          140
Cys Glu Asp Gly Arg Leu Arg Val Leu Lys Pro Glu Trp Phe Arg Gly
145          150          155          160
Arg Asp Val Leu Asp Leu Gly Cys Asn Val Gly His Leu Thr Leu Ser
165          170          175
Ile Ala Cys Lys Trp Gly Pro Ser Arg Met Val Gly Leu Asp Ile Asp
180          185          190
Ser Arg Leu Ile His Ser Ala Arg Gln Asn Ile Arg His Tyr Leu Ser
195          200          205
Glu Glu Leu Arg Leu Pro Pro Gln Thr Leu Glu Gly Asp Pro Gly Ala
210          215          220
Glu Gly Glu Glu Gly Thr Thr Thr Val Arg Lys Arg Ser Cys Phe Pro
225          230          235          240
Ala Ser Leu Thr Ala Ser Arg Gly Pro Ile Ala Ala Pro Gln Val Pro
245          250          255
Leu Asp Gly Ala Asp Thr Ser Val Phe Pro Asn Asn Val Val Phe Val
260          265          270
Thr Gly Asn Tyr Val Leu Asp Arg Asp Asp Leu Val Glu Ala Gln Thr
275          280          285
Pro Glu Tyr Asp Val Val Leu Cys Leu Ser Leu Thr Lys Trp Val His
290          295          300
Leu Asn Trp Gly Asp Glu Gly Leu Lys Arg Met Phe Arg Arg Ile Tyr
305          310          315          320
Arg His Leu Arg Pro Gly Gly Ile Leu Val Leu Glu Pro Gln Pro Trp
325          330          335
Ser Ser Tyr Gly Lys Arg Lys Thr Leu Thr Glu Thr Ile Tyr Lys Asn
340          345          350
Tyr Tyr Arg Ile Gln Leu Lys Pro Glu Gln Phe Ser Ser Tyr Leu Thr
355          360          365
Ser Pro Asp Val Gly Phe Ser Ser Tyr Glu Leu Val Ala Thr Pro His
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Arg Ser Pro Ser His
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<210> 6107

<211> 896

<212> DNA

<213> Homo sapiens

<400> 6107

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<210> 6108

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6108

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 20 25 30
 Pro Ala Cys Leu Leu Gly Arg Pro Trp Met Ser Arg Arg Cys Ser Arg
 35 40 45
 Leu Gly Ser Thr Pro Pro Pro Ala Pro Ala Ser Pro Val Glu Ser Pro
 50 55 60
 Arg Pro Ser Pro Ala Ser Ser Ala Phe Ser Ser Leu Pro Ser Asp Gly
 65 70 75 80
 Trp Gly Ser Ser Val Gly Ser Gly Leu Pro Trp Pro Ala Thr Arg Trp

	85		90		95										
Ser	Thr	Cys	Pro	Arg	Trp	Arg	Thr	Asp	Val	Ser	Pro	Ala	Asp	Thr	Ile
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Ala	Pro	Arg	Ser	Trp	Leu	Leu	Pro	Leu	Ser	Ala	Thr				
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<210> 6109

<211> 2087

<212> DNA

<213> Homo sapiens

<400> 6109

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120

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<210> 6110

<211> 323

<212> PRT

<213> Homo sapiens

<400> 6110

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Ser	Phe	Arg	Ala	Ser	Ser	Ala	Cys	Gly	Ala	Gly	Gly	Glu	Val	Gly	Gly
			20					25					30		
Pro	Gly	Ala	Ala	Ala	Gly	Leu	Thr	Leu	Leu	Cys	Ser	Leu	Val	Pro	Ile
			35					40					45		
Cys	Val	Leu	Arg	Arg	Pro	Gly	Ala	Asn	His	Glu	Gly	Ser	Ala	Ser	Arg
		50				55					60				
Gln	Lys	Ala	Leu	Ser	Leu	Val	Ser	Cys	Phe	Ala	Gly	Gly	Val	Phe	Leu
65					70					75				80	
Ala	Thr	Cys	Leu	Leu	Asp	Leu	Leu	Pro	Asp	Tyr	Leu	Ala	Ala	Ile	Asp
			85					90						95	
Glu	Ala	Leu	Ala	Ala	Leu	His	Val	Thr	Leu	Gln	Phe	Pro	Leu	Gln	Glu
			100					105					110		
Phe	Ile	Leu	Ala	Met	Gly	Phe	Phe	Leu	Val	Leu	Val	Met	Glu	Gln	Ile
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Arg	Ala	Leu	Leu	Gly	Thr	Val	Asn	Gly	Gly	Pro	Gln	His	Trp	His	Asp

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		180				185							190		
Glu	Gly	Leu	Ala	Val	Gly	Leu	Gln	Arg	Asp	Arg	Ala	Arg	Ala	Met	Glu
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		210				215						220			
Ser	Leu	Arg	Leu	Leu	Gln	Ser	His	Leu	Arg	Ala	Gln	Val	Val	Ala	Gly
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Cys	Gly	Ile	Leu	Phe	Ser	Cys	Met	Thr	Pro	Leu	Gly	Ile	Gly	Leu	Gly
			245						250					255	
Ala	Ala	Leu	Ala	Glu	Ser	Ala	Gly	Pro	Leu	His	Gln	Leu	Ala	Gln	Ser
		260						265					270		
Val	Leu	Glu	Gly	Met	Ala	Ala	Gly	Thr	Phe	Leu	Tyr	Ile	Thr	Phe	Leu
		275					280					285			
Glu	Ile	Leu	Pro	Gln	Glu	Leu	Ala	Ser	Ser	Glu	Gln	Arg	Ile	Leu	Lys
		290				295					300				
Val	Ile	Leu	Leu	Leu	Ala	Gly	Phe	Ala	Leu	Leu	Thr	Gly	Leu	Leu	Phe
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<210> 6111

<211> 1706

<212> DNA

<213> Homo sapiens

<400> 6111

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<210> 6112

<211> 110

<212> PRT

<213> Homo sapiens

<400> 6112

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		20						25					30		
Pro	Leu	Pro	Gly	Phe	Lys	Gln	Phe	Ser	Cys	Arg	Ser	Leu	Pro	Ser	Ser
		35				40						45			
Trp	Asp	Tyr	Arg	His	Ala	Pro	Pro	Arg	Gln	Ala	Asn	Phe	Cys	Ile	Phe
	50					55					60				
Ser	Arg	Asp	Gly	Val	Ser	Pro	Cys	Trp	Pro	Gly	Trp	Ser	Gln	Thr	Pro
65				70					75					80	
Asp	Leu	Arg	Arg	Ser	Thr	His	Leu	Ser	Val	Pro	Lys	Cys	Trp	Asp	Tyr
			85					90					95		
Arg	Arg	Glu	Pro	Pro	His	Leu	Ala	Tyr	Glu	Trp	Ser	Phe	Asn		

100

105

110

<210> 6113

<211> 1095

<212> DNA

<213> Homo sapiens

<400> 6113

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1095

<210> 6114

<211> 87

<212> PRT

<213> Homo sapiens

<400> 6114

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Leu Arg Lys Glu Ala Lys Lys Arg Gly His Lys Lys Pro Arg Lys Asp
35           40           45
Pro Gly Val Pro Asn Ser Ala Pro Phe Lys Glu Ala Leu Leu Glu Glu
50           55           60
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65           70           75           80
Leu Asp Arg Gln Lys Glu Leu
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<210> 6115

<211> 411

<212> DNA

<213> Homo sapiens

<400> 6115

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300
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<210> 6116

<211> 129

<212> PRT

<213> Homo sapiens

<400> 6116

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Met Ala Thr Asn Ser Ser Gln Val His Ser Gly Pro Gly Thr Ser Val
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20           25           30
Gln Val Lys Thr Pro Thr Leu Gln Val Arg Gly Ala Ser Ala Leu Ala
35           40           45
Pro Gln Phe Pro Gln Arg Asn Arg Leu Leu Ala Ser Arg Val Gly Tyr
50           55           60
Arg Val Ser Val Leu His Gly Ile Tyr Glu Asp Val Pro Pro Lys Leu
65           70           75           80
Leu Pro Pro Pro Pro Trp Asp Ala Thr Val Arg Pro Ala Asp Glu Phe
85           90           95
Leu Pro Gln Arg Pro Arg Glu Gly Gly Leu Arg Ala Ala Ala Ala Ala
100          105          110
Thr Gly Gly Glu Ala Ser Ala Gly Asn Leu Gly Pro Gly Gly Ala Arg

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115 120 125

Arg

<210> 6117
 <211> 962
 <212> DNA
 <213> Homo sapiens

<400> 6117
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 180
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 240
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 360
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 420
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 480
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 540
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 660
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 720
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 780
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 840
 aatacgtatt tttggcagg agagggaacg gtccatgaaa tctttatgtg atataaggat
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 aa
 962

<210> 6118
 <211> 113
 <212> PRT
 <213> Homo sapiens

<400> 6118
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<400> 6120																
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Thr	Pro	His	Gly	Leu	His	Gly	Asn	Ile	Thr	Val	Thr	Ile	Ser	Gln	Ser	
			20					25					30			
Gln	Arg	Gly	Pro	Thr	Glu	Leu	Met	Pro	Ala	Cys	Phe	Lys	Pro	Thr	Asn	
		35					40					45				
Glu	Asn	Ser	Pro	Trp	Glu	Thr	Cys	Leu	Asp	Asn	Thr	Leu	Asp	Pro	Asn	
	50					55					60					
Lys	Cys	Phe	Asn	Pro	Thr	Ser	Pro	Leu	Ser	Leu	Pro	Leu	Ser	Cys	Pro	
65					70					75				80		
Tyr	Pro	Leu	Val	Glu	His	Val	Cys	Pro	Lys	Arg	Pro	Cys	Lys	Val	Cys	
				85					90					95		
Cys	Pro	Val	Leu	Ser	Gly	Leu	Cys	Gln	Gly	Ile	Lys	Leu	Leu	Leu	Leu	

100
Cys Asp Val Ser Cys Cys
115

105

110

<210> 6121
<211> 1039
<212> DNA
<213> Homo sapiens

<400> 6121
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120
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180
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240
taattgcaaa ccagggttgt cctcgatcta agctttcaaa aagtacttat gaagaagtta
300
aaaccatttt gagtaagaag ataaactgga ttgtgcagta tgcacaaaat aaggatctgg
360
attcagattc tgaatgttct aaaaagcccc agcatcatct gtttaatttc aggcataagc
420
cagaagaaaa attactccca cagtttgagt cccaagtacc aaaatattct gcaaaatgga
480
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540
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600
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720
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780
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840
gaatgaagtc gcacctacc ataaacaact gacctaaaca gacttacttc gtatgcctg
900
ccctttattg gtctccaga catgcaaact ttgaagaagt ttgaagaaag ttgtggtccg
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<210> 6122
<211> 221
<212> PRT
<213> Homo sapiens

<400> 6122
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Ile Cys Ser Val Cys Lys Leu Gly Thr Asp Lys Glu Thr Leu Ser Phe
      20           25           30
Cys His Ile Cys Phe Glu Leu Asn Ile Glu Gly Val Pro Lys Ser Asp
      35           40           45
Leu Leu His Thr Lys Ser Leu Arg Gly His Lys Asp Cys Phe Glu Lys
      50           55           60
Tyr His Leu Ile Ala Asn Gln Gly Cys Pro Arg Ser Lys Leu Ser Lys
      65           70           75           80
Ser Thr Tyr Glu Glu Val Lys Thr Ile Leu Ser Lys Lys Ile Asn Trp
      85           90           95
Ile Val Gln Tyr Ala Gln Asn Lys Asp Leu Asp Ser Asp Ser Glu Cys
      100          105          110
Ser Lys Lys Pro Gln His His Leu Phe Asn Phe Arg His Lys Pro Glu
      115          120          125
Glu Lys Leu Leu Pro Gln Phe Glu Ser Gln Val Pro Lys Tyr Ser Ala
      130          135          140
Lys Trp Ile Asp Gly Ser Ala Gly Gly Ile Ser Asn Cys Thr Gln Arg
      145          150          155          160
Ile Leu Glu Gln Arg Glu Asn Thr Asp Phe Gly Leu Ser Met Leu Gln
      165          170          175
Asp Ser Gly Ala Thr Leu Cys Arg Asn Ser Val Leu Trp Pro His Ser
      180          185          190
His Asn Gln Ala Gln Lys Lys Glu Glu Thr Ile Ser Ser Pro Glu Ala
      195          200          205
Asn Val Gln Thr Gln His Pro His Tyr Ser Arg Glu Glu
      210          215          220

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<210> 6123

<211> 900

<212> DNA

<213> Homo sapiens

<400> 6123

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120
gcgaaacaac aagagaaaaa aaaggaagct gccctctgcc caaaaccac gtcgagggcc
180
ccaaacctgg gacccttagg tcttttctca cttagcgtgc ccaaccttct cctggcagga
240
aacaagcctc caggtctgct tccccgcaaa ggactataca tggcaaatga cttaaagctc
300
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360
gaaaaaggaa gtttgtctgc catgcgtttc ctcaccgccg tgaacttgga gcatccagag
420
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480
ctctgggaat cctctgggag gaccttggat gactttctga ccttccccag gcacgttttc
540
agggtcatga tctgcccccc gccgggggga tctactgtcc tcccagtcac accctctccc
600

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ccgcaccgcc ttctgtctgt cttctcttct tcccagaatg aagacatcac cgagccgcag
 660
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 720
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 780
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<210> 6124

<211> 300

<212> PRT

<213> Homo sapiens

<400> 6124

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Arg	Leu	Asn	Pro	Gly	Gly	Gly	Cys	Gly	Glu	Leu	Arg	Ser	His	His	
		20					25					30			
Cys	Thr	Pro	Ala	Trp	Ala	Thr	Arg	Ala	Lys	Gln	Gln	Glu	Lys	Lys	Lys
		35				40					45				
Glu	Ala	Ala	Leu	Cys	Pro	Lys	Pro	Thr	Ser	Arg	Ser	Pro	Asn	Leu	Gly
	50					55					60				
Pro	Leu	Gly	Leu	Phe	Ser	Leu	Ser	Val	Pro	Asn	Leu	Leu	Leu	Ala	Gly
65					70					75				80	
Asn	Lys	Pro	Pro	Gly	Leu	Leu	Pro	Arg	Lys	Gly	Leu	Tyr	Met	Ala	Asn
			85						90				95		
Asp	Leu	Lys	Leu	Leu	Arg	His	His	Leu	Gln	Ile	Pro	Ile	His	Phe	Pro
		100						105					110		
Lys	Asp	Phe	Leu	Ser	Val	Met	Leu	Glu	Lys	Gly	Ser	Leu	Ser	Ala	Met
		115					120					125			
Arg	Phe	Leu	Thr	Ala	Val	Asn	Leu	Glu	His	Pro	Glu	Met	Leu	Glu	Lys
	130					135					140				
Ala	Ser	Arg	Glu	Leu	Trp	Met	Arg	Val	Trp	Ser	Arg	Val	Ser	Val	Gly
145					150					155					160
Leu	Trp	Glu	Ser	Ser	Gly	Arg	Thr	Leu	Asp	Asp	Phe	Leu	Thr	Phe	Pro
			165					170					175		
Arg	His	Val	Phe	Arg	Val	Met	Ile	Leu	Pro	Pro	Pro	Gly	Gly	Ser	Thr
		180						185					190		
Val	Leu	Pro	Val	Thr	Pro	Leu	Ser	Pro	His	Arg	Leu	Pro	Ala	Val	Phe
		195					200					205			
Ser	Ser	Ser	Gln	Asn	Glu	Asp	Ile	Thr	Glu	Pro	Gln	Ser	Ile	Leu	Ala
	210					215					220				
Ala	Ala	Glu	Lys	Ala	Gly	Met	Ser	Ala	Glu	Gln	Ala	Gln	Gly	Leu	Leu
225					230					235				240	
Glu	Lys	Ile	Ala	Thr	Pro	Lys	Val	Lys	Asn	Gln	Leu	Lys	Glu	Thr	Thr
			245					250					255		
Glu	Ala	Ala	Cys	Arg	Tyr	Gly	Ala	Phe	Gly	Leu	Pro	Ile	Thr	Val	Ala
		260						265					270		
His	Val	Asp	Gly	Gln	Thr	His	Met	Leu	Phe	Gly	Ser	Asp	Arg	Met	Glu
		275					280					285			
Leu	Leu	Ala	His	Leu	Leu	Gly	Glu	Lys	Trp	Met	Gly				

290

295

300

<210> 6125

<211> 468

<212> DNA

<213> Homo sapiens

<400> 6125

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 180
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 240
 ctgctgcagg aggagaggac ccagcgccag gacttggagc ttaggttaga agagaccga
 300
 gaagccttgg caggacgagc atatgcagct gaacagatgg aaggatttga actgcagacc
 360
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<210> 6126

<211> 156

<212> PRT

<213> Homo sapiens

<400> 6126

Xaa	Thr	Val	Thr	Gln	Glu	Lys	Ser	Arg	Met	Glu	Ala	Ser	Tyr	Leu	Ala
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Asp	Lys	Lys	Lys	Met	Lys	Gln	Asp	Leu	Glu	Asp	Ala	Ser	Asn	Lys	Ala
			20					25					30		
Glu	Glu	Glu	Arg	Ala	Arg	Leu	Glu	Gly	Glu	Leu	Lys	Gly	Leu	Gln	Glu
			35				40					45			
Gln	Ile	Ala	Glu	Thr	Lys	Ala	Arg	Leu	Ile	Thr	Gln	Gln	His	Asp	Arg
	50					55				60					
Ala	Gln	Glu	Gln	Ser	Asp	His	Ala	Leu	Met	Leu	Arg	Glu	Leu	Gln	Lys
65					70				75					80	
Leu	Leu	Gln	Glu	Glu	Arg	Thr	Gln	Arg	Gln	Asp	Leu	Glu	Leu	Arg	Leu
			85					90					95		
Glu	Glu	Thr	Arg	Glu	Ala	Leu	Ala	Gly	Arg	Ala	Tyr	Ala	Ala	Glu	Gln
			100					105					110		
Met	Glu	Gly	Phe	Glu	Leu	Gln	Thr	Lys	Gln	Leu	Thr	Arg	Glu	Val	Glu
		115				120					125				
Glu	Leu	Lys	Ser	Glu	Leu	Gln	Ala	Ile	Arg	Asp	Glu	Lys	Asn	Gln	Pro
	130					135					140				
Asp	Pro	Arg	Leu	Gln	Glu	Leu	Gln	Glu	Glu	Ala	Ala				
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<210> 6127

<211> 1900

<212> DNA

<213> Homo sapiens

<400> 6127

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120
cgggcaagag actccaatat ggtgagggcg gcagcagagc tggccctgag ctgcctgcct
180
cacgcccacg cattgaaccc taatgagatc cagcgggccc tggcgcagtg caaggaacag
240
gacaacctga tgttgagaaa ggctgcacg gcagtggag aggagctaa ggggtggggc
300
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360
gcaggtggct catccacagc ccgtgaaggg gctacaagct gtagtgccag tgggatcagg
420
gcaggtgggg aagctggggc gggatatgct gagggtagag gggggccagg gactgagccg
480
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720
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1140
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 1860
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<210> 6128

<211> 530

<212> PRT

<213> Homo sapiens

<400> 6128

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Thr	Ile	Leu	Val	Glu	Cys	Trp	Asp	Gly	His	Leu	Thr	Pro	Pro	Glu	Val
		20					25					30			
Ala	Ser	Leu	Ala	Asp	Arg	Ala	Ser	Arg	Ala	Arg	Asp	Ser	Asn	Met	Val
		35					40					45			
Arg	Ala	Ala	Ala	Glu	Leu	Ala	Leu	Ser	Cys	Leu	Pro	His	Ala	His	Ala
		50				55				60					
Leu	Asn	Pro	Asn	Glu	Ile	Gln	Arg	Ala	Leu	Val	Gln	Cys	Lys	Glu	Gln
65				70					75					80	
Asp	Asn	Leu	Met	Leu	Glu	Lys	Ala	Cys	Met	Ala	Val	Glu	Glu	Ala	Ala
			85					90					95		
Lys	Gly	Gly	Gly	Val	Tyr	Pro	Glu	Val	Leu	Phe	Glu	Val	Ala	His	Gln
			100					105					110		
Trp	Phe	Trp	Leu	Tyr	Glu	Gln	Thr	Ala	Gly	Gly	Ser	Ser	Thr	Ala	Arg
		115					120					125			
Glu	Gly	Ala	Thr	Ser	Cys	Ser	Ala	Ser	Gly	Ile	Arg	Ala	Gly	Gly	Glu
		130				135					140				
Ala	Gly	Arg	Gly	Met	Pro	Glu	Gly	Arg	Gly	Gly	Pro	Gly	Thr	Glu	Pro
145					150					155				160	
Val	Thr	Val	Ala	Ala	Ala	Ala	Val	Thr	Ala	Ala	Ala	Thr	Val	Val	Pro
			165					170					175		
Val	Ile	Ser	Val	Gly	Ser	Ser	Leu	Tyr	Pro	Gly	Pro	Gly	Leu	Gly	His
			180					185					190		
Gly	His	Ser	Pro	Gly	Leu	His	Pro	Tyr	Thr	Ala	Leu	Gln	Pro	His	Leu
		195					200					205			
Pro	Cys	Ser	Pro	Gln	Tyr	Leu	Thr	His	Pro	Ala	His	Pro	Ala	His	Pro
		210				215					220				
Met	Pro	His	Met	Pro	Arg	Pro	Ala	Val	Phe	Pro	Val	Pro	Ser	Ser	Ala
225					230					235				240	
Tyr	Pro	Gln	Gly	Val	His	Pro	Ala	Phe	Leu	Gly	Ala	Gln	Tyr	Pro	Tyr
			245					250					255		
Ser	Val	Thr	Pro	Pro	Ser	Leu	Ala	Ala	Thr	Ala	Val	Ser	Phe	Pro	Val

260 265 270
 Pro Ser Met Ala Pro Ile Thr Val His Pro Tyr His Thr Glu Pro Gly
 275 280 285
 Leu Pro Leu Pro Thr Ser Val Ala Cys Glu Leu Trp Gly Gln Gly Thr
 290 295 300
 Val Ser Ser Val His Pro Ala Ser Thr Phe Pro Ala Ile Gln Gly Ala
 305 310 315 320
 Ser Leu Pro Ala Leu Thr Thr Gln Pro Ser Pro Leu Val Ser Gly Gly
 325 330 335
 Phe Pro Pro Pro Glu Glu Thr His Ser Gln Pro Val Asn Pro His
 340 345 350
 Ser Leu His His Leu His Ala Ala Tyr Arg Val Gly Met Leu Ala Leu
 355 360 365
 Glu Met Leu Gly Arg Arg Ala His Asn Asp His Pro Asn Asn Phe Ser
 370 375 380
 Arg Ser Pro Pro Tyr Thr Asp Asp Val Lys Trp Leu Leu Gly Leu Ala
 385 390 395 400
 Ala Lys Leu Gly Val Asn Tyr Val His Gln Phe Cys Val Gly Ala Ala
 405 410 415
 Lys Gly Val Leu Ser Pro Phe Val Leu Gln Glu Ile Val Met Glu Thr
 420 425 430
 Leu Gln Arg Leu Ser Pro Ala His Ala His Asn His Leu Arg Ala Pro
 435 440 445
 Ala Phe His Gln Leu Val Gln Arg Cys Gln Gln Ala Tyr Met Gln Tyr
 450 455 460
 Ile His His Arg Leu Ile His Leu Thr Pro Ala Asp Tyr Asp Asp Phe
 465 470 475 480
 Val Asn Ala Ile Arg Ser Ala Arg Ser Ala Phe Cys Leu Thr Pro Met
 485 490 495
 Gly Met Met Gln Phe Asn Asp Ile Leu Gln Asn Leu Lys Arg Ser Lys
 500 505 510
 Gln Thr Lys Glu Leu Trp Gln Arg Val Ser Leu Glu Met Ala Thr Phe
 515 520 525
 Ser Pro
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<210> 6129

<211> 2012

<212> DNA

<213> Homo sapiens

<400> 6129

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 120

 gggggggggg gggctgatcg gcgctaccg attggacaac ttggcatggg ggggggcctc
 180

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 240

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 300

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 360

accttcttca ctgcgctgct ctcgctgctg gtttccgggc ctcgcctggt cctgctgcag
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<210> 6130

<211> 364

<212> PRT

<213> Homo sapiens

<400> 6130

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Arg Val Ala Leu Lys Leu Asp Gln Thr Phe Pro Phe Ser Leu Met Arg
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Gly His Met Pro Thr Leu Pro Pro Tyr Gln Pro Ala Ser Gly Leu Cys
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355

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<210> 6131

<211> 3526

<212> DNA

<213> Homo sapiens

<400> 6131

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<210> 6132

<211> 167

<212> PRT

<213> Homo sapiens

<400> 6132

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<210> 6133

<211> 4156

<212> DNA

<213> Homo sapiens

<400> 6133

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<211> 595

<212> PRT

<213> Homo sapiens

<400> 6134

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Lys	Asp	Gln	Phe	Ser	Cys	Gly	Asn	Ser	Val	Ala	Asp	Gln	Ala	Phe	Leu
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Lys Gly Phe Leu Gly Cys Phe Pro Asp Ile Ile Gly Thr His Lys Gly		
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515	520	525
Ile Thr Leu Gln Asp Lys Gln Asn Met Val Lys Arg Val Ser Ile Met		
530	535	540
Ser Tyr Ala Leu Gln Ala Glu Met Asn His Phe His Ser Asn Arg Ile		

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 Tyr Asp Tyr Asn Ser Val Ile Arg Leu Tyr Leu Glu Gln Gln Val Gln
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 <213> Homo sapiens

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 Ile Leu Pro Thr Arg Lys Asn His Asn Met Ala Ser Arg Pro Leu Thr
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<211> 550

<212> PRT

<213> Homo sapiens

<400> 6138

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Asp	Ile	Lys	Xaa	Ile	Lys	Cys	Gly	Thr	Xaa	Met	Glu	Lys	Glu	Phe	Gly
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Ile Glu Glu Lys Asp Ile His Glu Glu Leu Pro Lys Arg Lys Glu Arg
465              470              475              480
Lys Gln Glu Glu Arg Glu Asp Asp Lys Asp Ser Asp Gln Glu Thr Val
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Thr Gly Glu Ala Leu Ser Glu Glu Thr Thr Ala Gly Glu Gln Ser Thr
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<210> 6139

<211> 2249

<212> DNA

<213> Homo sapiens

<400> 6139

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<211> 381

<212> PRT

<213> Homo sapiens

<400> 6140

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Ala Phe Arg Arg Ser Leu His Asp Pro Asp Gly Leu Val Ala Thr Tyr		335
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<210> 6141

<211> 5651

<212> DNA

<213> Homo sapiens

<400> 6141

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<211> 513

<212> PRT

<213> Homo sapiens

<400> 6142

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<211> 1137

<212> DNA

<213> Homo sapiens

<400> 6143

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<211> 141

<212> PRT

<213> Homo sapiens

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<212> DNA

<213> Homo sapiens

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<213> Homo sapiens

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 Gln Pro Pro Pro Val Lys Cys Gln Glu Thr Cys Ala Pro Lys Thr Lys
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 Asp Pro Cys Ala Pro Gln Val Lys Lys Gln Cys Pro Pro Lys Asp Thr
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<211> 1852

<212> DNA

<213> Homo sapiens

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<211> 410

<212> PRT

<213> Homo sapiens

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      225          230          235          240
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<210> 6149
<211> 1949
<212> DNA
<213> Homo sapiens

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<210> 6150

<211> 508

<212> PRT

<213> Homo sapiens

<400> 6150

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 385 390 395 400
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 Ile Leu Pro Gly Ser Lys Thr Arg Glu Pro Ser Asn Ala Lys Gln Gln
 435 440 445
 Lys Glu Lys Asn Lys Val Lys Lys Lys Arg Lys Lys Glu Thr Lys Gly
 450 455 460
 Arg Glu Val Arg Phe Gly Lys Arg Ser Xaa Ser Ser Ala Pro Arg Ser
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<210> 6151

<211> 648

<212> DNA

<213> Homo sapiens

<400> 6151

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<211> 388

<212> PRT

<213> Homo sapiens

<400> 6154

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 Asn Phe Ser Pro Ser Gly His Leu Leu Ala Ser Gly Ser Arg Asp Lys
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 Arg Ala His Thr Ala Thr Val Arg Ser Val His Phe Cys Ser Asp Gly
 85 90 95
 Gln Ser Phe Val Thr Ala Ser Asp Asp Lys Thr Val Lys Val Trp Ala
 100 105 110
 Thr His Arg Gln Lys Phe Leu Phe Ser Leu Ser Gln His Ile Asn Trp
 115 120 125
 Val Arg Cys Ala Lys Phe Ser Pro Asp Gly Arg Leu Ile Val Ser Ala
 130 135 140
 Ser Asp Asp Lys Thr Val Lys Leu Trp Asp Lys Ser Ser Arg Glu Cys
 145 150 155 160
 Val His Ser Tyr Cys Glu His Gly Gly Phe Val Thr Tyr Val Asp Phe
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 His Pro Ser Gly Thr Cys Ile Ala Ala Gly Met Asp Asn Thr Val
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 Lys Val Trp Asp Val Arg Thr His Arg Leu Leu Gln His Tyr Gln Leu
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 Met Gly Asn Leu Pro Glu Val Asp Phe Pro Val Pro Pro Gly Arg Gly
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 325 330 335
 Pro Gln Thr Leu Thr Ser Thr Leu Glu His Ile Val Gly Gln Leu Asp
 340 345 350
 Val Leu Thr Gln Thr Val Ser Ile Leu Glu Gln Arg Leu Thr Leu Thr
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380

<210> 6155
<211> 995
<212> DNA
<213> Homo sapiens

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<210> 6156
<211> 164
<212> PRT
<213> Homo sapiens

<400> 6156
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<210> 6158

<211> 455

<212> PRT

<213> Homo sapiens

<400> 6158

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5341

450

455

<210> 6159

<211> 4310

<212> DNA

<213> Homo sapiens

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<210> 6160

<211> 551

<212> PRT

<213> Homo sapiens

<400> 6160

Leu	Glu	Val	Arg	Ala	Gly	Pro	Asp	Ser	Ala	Gly	Ile	Ala	Leu	Tyr	Ser
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His	Glu	Asp	Val	Cys	Val	Phe	Lys	Cys	Ser	Val	Ser	Arg	Glu	Thr	Glu

	20		25		30	
Cys Ser Arg Val Gly Lys Gln Ser Phe Ile Ile Thr Leu Gly Cys Asn						
	35		40		45	
Ser Val Leu Ile Gln Phe Ala Thr Pro Asn Asp Phe Cys Ser Phe Tyr						
	50		55		60	
Asn Ile Leu Lys Thr Cys Arg Gly His Thr Leu Glu Arg Ser Val Phe						
65		70		75		80
Ser Glu Arg Thr Glu Glu Ser Ser Ala Val Gln Tyr Phe Gln Phe Tyr						
	85		90		95	
Gly Tyr Leu Ser Gln Gln Gln Asn Met Gln Asp Tyr Val Arg Thr						
	100		105		110	
Gly Thr Tyr Gln Arg Ala Ile Leu Gln Asn His Thr Asp Phe Lys Asp						
	115		120		125	
Lys Ile Val Leu Asp Val Gly Cys Gly Ser Gly Ile Leu Ser Phe Phe						
	130		135		140	
Ala Ala Gln Ala Gly Ala Arg Lys Ile Tyr Ala Val Glu Ala Ser Thr						
145		150		155		160
Met Ala Gln His Ala Glu Val Leu Val Lys Ser Asn Asn Leu Thr Asp						
	165		170		175	
Arg Ile Val Val Ile Pro Gly Lys Val Glu Glu Val Ser Leu Pro Glu						
	180		185		190	
Gln Val Asp Ile Ile Ile Ser Glu Pro Met Gly Tyr Met Leu Phe Asn						
	195		200		205	
Glu Arg Met Leu Glu Ser Tyr Leu His Ala Lys Lys Tyr Leu Lys Pro						
	210		215		220	
Ser Gly Asn Met Phe Pro Thr Ile Gly Asp Val His Leu Ala Pro Phe						
225		230		235		240
Thr Asp Glu Gln Leu Tyr Met Glu Gln Phe Thr Lys Ala Asn Phe Trp						
	245		250		255	
Tyr Gln Pro Ser Phe His Gly Val Asp Leu Ser Ala Leu Arg Gly Ala						
	260		265		270	
Ala Val Asp Glu Tyr Phe Arg Gln Pro Val Val Asp Thr Phe Asp Ile						
	275		280		285	
Arg Ile Leu Met Ala Lys Ser Val Lys Tyr Thr Val Asn Phe Leu Glu						
	290		295		300	
Ala Lys Glu Gly Asp Leu His Arg Ile Glu Ile Pro Phe Lys Phe His						
305		310		315		320
Met Leu His Ser Gly Leu Val His Gly Leu Ala Phe Trp Phe Asp Val						
	325		330		335	
Ala Phe Ile Gly Ser Ile Met Thr Val Trp Leu Ser Thr Ala Pro Thr						
	340		345		350	
Glu Pro Leu Thr His Trp Tyr Gln Val Arg Cys Leu Phe Gln Ser Pro						
	355		360		365	
Leu Phe Ala Lys Ala Gly Asp Thr Leu Ser Gly Thr Cys Leu Leu Ile						
	370		375		380	
Ala Asn Lys Arg Gln Ser Tyr Asp Ile Ser Ile Val Ala Gln Val Asp						
385		390		395		400
Gln Thr Gly Ser Lys Ser Ser Asn Leu Leu Asp Leu Lys Asn Pro Phe						
	405		410		415	
Phe Arg Tyr Thr Gly Thr Thr Pro Ser Pro Pro Gly Ser His Tyr						
	420		425		430	
Thr Ser Pro Ser Glu Asn Met Trp Asn Thr Gly Ser Thr Tyr Asn Leu						
	435		440		445	
Ser Ser Gly Met Ala Val Ala Gly Met Pro Thr Ala Tyr Asp Leu Ser						

450	455	460
Ser Val Ile Ala Ser Gly Ser Ser Val Gly His Asn Asn Leu Ile Pro		
465	470	475
Leu Ala Asn Thr Gly Ile Val Asn His Thr His Ser Arg Met Gly Ser		480
	485	490
Ile Met Ser Thr Gly Ile Val Gln Gly Ser Ser Gly Ala Gln Gly Ser		495
	500	505
Gly Gly Gly Ser Thr Ser Ala His Tyr Ala Val Asn Ser Gln Phe Thr		510
	515	520
Met Gly Gly Pro Ala Ile Ser Met Ala Ser Pro Met Ser Ile Pro Thr		525
	530	540
Asn Thr Met His Tyr Gly Ser		
545	550	

<210> 6161

<211> 1489

<212> DNA

<213> Homo sapiens

<400> 6161

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gatgggggaa atggcaagaa aaggagcacc ctgcttagaa agggaacgga gccgggtgtg
120
gtggctcagc cctgcaatcc anacaccttg ggaggccgaa gcaaggagat cacctgagcc
180
caagagtttg agaccacca catagcaaga ccccatctct attttttga aaaaaaaaaa
240
aaaagcagca accagcagga tgggtggaaa aaagttgctg aaggctcttc aagatcctct
300
ctgcctgctc cttctctcac agagggacag gggagggtga tgagtcagtg gactgaatgt
360
cccatgggg atgaaggatg gttgggtca gggtcctaga gggagggtg gaaggaggga
420
aggagatggc cagagaagga tgtaggacac agaggtgccg ccgtggatca ccaagaggtt
480
caggactggc cagaggaagg agaggagatc aaggcaagca tgaggcactt gggagatgca
540
tctgtgctg cacacagctg aaatccccag gaaataagac gggagcaggg tgggtttctg
600
cagccgaggt gagaccaaag tgccagctca ctgccaccct cagtaaagac taacttgccc
660
ttccccaca ctcctctccc agaagtagct tgctctctc tgctgccac acatcggggg
720
gtcagggaa agtccccct cctggacag ctagtgttcc ctaggccaag gccagtcctt
780
gcagagatga ggagctggga aatccccctc tccatcccg cagtcacag cgtgccagat
840
cctgtgctgc gggcttttca cacacagcct cttagacgct tagcctgtga ggcgggtgct
900
gttgtcttc cttccattt tgcaactgag caaacagcct gaaagagaca aaaaccaggt
960
agttagcatg accccaaagc cactccctgg tctacgctgt tctgcagcct gagcctgggg
1020

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tggccagggtg gggttgtgca gtgagggggg gaaggagaat agccccaaa aatgctgccg
 1080
 gaatggtaaa gggcctggac tgcaaagcta gtgacttgag ctttattttg tggcactgga
 1140
 ggttttccca gtcattgtaa tgatacaatc agatttgcgt tgtcttcaag ttaccatggg
 1200
 aaccgtactt ccaccaccca agagtggatt ggagaaggca aaactagggc agagaagcca
 1260
 gggagtgttg agaaggtctg aaccagaca gtgggcagct gggccccaag acggatgggg
 1320
 gactccagaa gcgtggagct ggcagagaga aacctgcccg gggcatcaga gaaaagggcg
 1380
 actgtgcagg aacagagtag atgaggtggg gaacctttgg gtaagaagag ctgaatcagg
 1440
 agcattgagg cagcggtttt caaacctcag aagcaacagc agggccggc
 1489

<210> 6162

<211> 58

<212> PRT

<213> Homo sapiens

<400> 6162

Gly	Cys	Met	Ile	Phe	Ser	Arg	Phe	Ser	Thr	Glu	Gly	Ser	Glu	Leu	Trp
1				5					10					15	
Glu	Arg	Lys	Glu	Asp	Gly	Gly	Asn	Gly	Lys	Lys	Arg	Ser	Thr	Leu	Leu
			20				25						30		
Arg	Lys	Gly	Thr	Glu	Pro	Gly	Val	Val	Ala	His	Ala	Cys	Asn	Pro	Xaa
		35					40						45		
Thr	Leu	Gly	Gly	Arg	Ser	Lys	Glu	Ile	Thr						
	50					55									

<210> 6163

<211> 713

<212> DNA

<213> Homo sapiens

<400> 6163

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 60
 gagatgagtc cagctgcggt cagagccatg ggatgtgggt cactgtgacc cagtgggtca
 120
 cagggtgctga gcaaggaagg gctgggaggg tcaagcaaaa tctacaagaa aaatctaaag
 180
 gggcccagcc tctgccagga aaagcaggcc tggctctgct gaaaccccaa tcacgctctg
 240
 atggataccg gtacctgggc aaggataccg tggatggact tgattcttct ctctgaaat
 300
 gtacgagaag gtgcatgcgg ggatttcggc tgctgaaaa gcaaccctct aaaacccgag
 360
 tgtcattttt agaatcaaaa aggaaggaag gcagtggctg gctgcactgg tcagtaacga
 420
 gatctggagc ttttcgcctt aaggctcactg tttaaaactc tgccctgggt cagttgtaac
 480

agaaagtcac aactccctca caggcatcag ggtgcaactt tgaatgccaa gaggggctgt
 540
 gtctgttggt taccacgcgg cgagctcccg ggacacctcc tgacacctcc tgacagtgtc
 600
 tctttctcta ggagtctect ctcttccac ccaccatggc ggctggcct ggaggggagg
 660
 cattggggac tgagtccttc cccgacaggg agtctctctc cccctggcg cgc
 713

<210> 6164

<211> 120

<212> PRT

<213> Homo sapiens

<400> 6164

Met	Trp	Val	Thr	Val	Thr	Gln	Trp	Val	Thr	Gly	Ala	Glu	Gln	Gly	Arg
1				5				10						15	
Ala	Gly	Arg	Leu	Lys	Gln	Asn	Leu	Gln	Glu	Lys	Ser	Lys	Gly	Ala	Gln
			20				25						30		
Pro	Leu	Pro	Gly	Lys	Ala	Gly	Leu	Ala	Leu	Leu	Lys	Pro	Gln	Ser	Arg
			35				40					45			
Ser	Asp	Gly	Tyr	Arg	Tyr	Leu	Gly	Lys	Asp	Thr	Val	Asp	Gly	Leu	Asp
	50					55				60					
Ser	Ser	Leu	Leu	Lys	Cys	Thr	Arg	Arg	Cys	Met	Arg	Gly	Phe	Arg	Leu
65				70					75					80	
Pro	Glu	Lys	Gln	Pro	Ser	Lys	Thr	Arg	Val	Ser	Phe	Leu	Glu	Ser	Lys
			85				90						95		
Arg	Lys	Glu	Gly	Ser	Gly	Trp	Leu	His	Trp	Ser	Val	Thr	Arg	Ser	Gly
			100				105						110		
Ala	Phe	Arg	Leu	Lys	Val	Thr	Val								
			115				120								

<210> 6165

<211> 1004

<212> DNA

<213> Homo sapiens

<400> 6165

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 aagctgttcg gggctggagg gggtaaggcc ggcaagggcg gcccgacccc ccaggaggcc
 120
 atccagcggc tgcgggacac ggaagagatg ttaagcaaga aacaggagtt cctggagaag
 180
 aaaatcgagc aggagctgac ggccgccaag aagcacggca ccaaaaacaa gcgcggggcc
 240
 ctccaggcac tgaagcgtaa gaagaggtat gagaagcagc tggcgcagat cgacggcaca
 300
 ttatcaacca tcgagttcca gcgggaggcc ctggagaatg ccaacaccaa caccgaggtg
 360
 ctcaagaaca tgggctatgc cgccaaggcc atgaaggcgg cccatgacaa catggacatc
 420
 gataaagttg atgagttaat gcaggacatt gctgaccagc aagaacttgc agaggagatt
 480

tcaacagcaa tttcgaaacc tgtagggttt ggagaagagt ttgacgagga tgagctcatg
 540
 gcggaattag aagaactaga acaggaggaa ctagacaaga atttgctgga aatcagtgga
 600
 cccgaaacag tccctctacc aaatgttccc tctatagccc taccatcaaa acccgccaag
 660
 aagaaagaag aggaggacga cgacatgaag gaattggaga actgggctgg atccatgtaa
 720
 tgggggtccag cgctggctgg gccagacag actgtggtgg cctgcgcagc gaggaggcgt
 780
 gtgcgtgtgt ggggcaggca ggatgtggtg caggcagggt ccacgcttt cgactctcac
 840
 tccaaagcag tagggccgcg ttgctgctca ctctctgcat agcatggtct gcacctggga
 900
 gttggccggg gggagggggg cgagcgggct ggcacgtgcc tgctgtttat aatgttgaat
 960
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 1004

<210> 6166

<211> 239

<212> PRT

<213> Homo sapiens

<400> 6166

Pro	Ser	Arg	Ile	Gly	Arg	Arg	Arg	Pro	Ala	Arg	Arg	Ala	Ala	Thr	Met
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Ser	Val	Phe	Gly	Lys	Leu	Phe	Gly	Ala	Gly	Gly	Gly	Lys	Ala	Gly	Lys
			20					25				30			
Gly	Gly	Pro	Thr	Pro	Gln	Glu	Ala	Ile	Gln	Arg	Leu	Arg	Asp	Thr	Glu
		35				40					45				
Glu	Met	Leu	Ser	Lys	Lys	Gln	Glu	Phe	Leu	Glu	Lys	Lys	Ile	Glu	Gln
	50					55					60				
Glu	Leu	Thr	Ala	Ala	Lys	His	Gly	Thr	Lys	Asn	Lys	Arg	Ala	Ala	
65					70				75				80		
Leu	Gln	Ala	Leu	Lys	Arg	Lys	Lys	Arg	Tyr	Glu	Lys	Gln	Leu	Ala	Gln
			85					90					95		
Ile	Asp	Gly	Thr	Leu	Ser	Thr	Ile	Glu	Phe	Gln	Arg	Glu	Ala	Leu	Glu
			100					105					110		
Asn	Ala	Asn	Thr	Asn	Thr	Glu	Val	Leu	Lys	Asn	Met	Gly	Tyr	Ala	Ala
		115				120						125			
Lys	Ala	Met	Lys	Ala	Ala	His	Asp	Asn	Met	Asp	Ile	Asp	Lys	Val	Asp
	130					135					140				
Glu	Leu	Met	Gln	Asp	Ile	Ala	Asp	Gln	Gln	Glu	Leu	Ala	Glu	Glu	Ile
145				150					155					160	
Ser	Thr	Ala	Ile	Ser	Lys	Pro	Val	Gly	Phe	Gly	Glu	Glu	Phe	Asp	Glu
			165					170						175	
Asp	Glu	Leu	Met	Ala	Glu	Leu	Glu	Glu	Leu	Glu	Gln	Glu	Glu	Leu	Asp
		180					185						190		
Lys	Asn	Leu	Leu	Glu	Ile	Ser	Gly	Pro	Glu	Thr	Val	Pro	Leu	Pro	Asn
	195					200						205			
Val	Pro	Ser	Ile	Ala	Leu	Pro	Ser	Lys	Pro	Ala	Lys	Lys	Lys	Glu	Glu
	210					215						220			
Glu	Asp	Asp	Asp	Met	Lys	Glu	Leu	Glu	Asn	Trp	Ala	Gly	Ser	Met	

225

230

235

<210> 6167

<211> 1220

<212> DNA

<213> Homo sapiens

<400> 6167

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120
tcaaacttgt cttaatgaga tggaagtgtt ggatcaaaca ctgattgagc tgttctatgt
180
cctccacttc cccagtgcct tctctectcc cgggtctgcg cggacgcggc ctccttacct
240
catttgctc cgcctctccc cgctcctcta cgcgttttgg tccctgtttg gtgctttctg
300
tttgacgta cggcagttag tatgtatgtg acggaccccg agtcacccgc ggcctgggac
360
ccctgcctac cctcgtctc gccagccgag ctgtggaact agcgcgtgcc cctcgcgca
420
cctcggcgtc tccggctcgc cctcacttg tgggtggggcg cagctcctgg tccctcagct
480
gcgcgcgccc ccacgcggcc gggctgcggg tctagggggc cgcctctccc ctggctttcc
540
aagggtctag gtcgtgattc tagggcggtt gggcgctcag ggcctcgtg ggggtggcgt
600
gtctgccctt tttatctccc cgcaaggccc ccagtcttct agggaaagcca gtcagtgaag
660
cgcgagggtc cgggcgcgcc gagagagagt ccagtctttg aggaccgagt agtcctgggc
720
cacctcccgc ctctgctgtc agaagcagca gctgccgccg tggaatccaa aatttcggga
780
gctgtgacct tttcctcatg taaaacgagt agtcttgac gatctgggca taggaaccaa
840
tcagaaacaa tcgcttcagc aatcaagacc attgttcac atggaggaac ccatggatac
900
ctctgagcct ctatctgcat taccattcac tgggcagcag tcttttgagc caagtggcaa
960
atttgacag tatccatcga tgcagatgaa ccacatccag gcaactggga agtgaggac
1020
atagaacagc tcaatcagtg ttgatccaa cacttccatc tcattaagac aagtttgatt
1080
tttctttgct ttttatttca tggaatacat gagaatctct taactgttgg agtttccaag
1140
gaggcatacc tcatgacttc agttaatgga aagaacaaaa ctaaaatgct gtatggccaa
1200
agccacaaag ggaaggatcc
1220

<210> 6168

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6168

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Ala Lys Trp Gln Ile Trp Thr Val Ser Ile Asp Ala Asp Glu Pro His
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Pro Gly Thr Gly Glu Val Glu Asp Ile Glu Gln Leu Asn Gln Cys Leu
      20             25             30
Ile Gln His Phe His Leu Ile Lys Thr Ser Leu Ile Phe Leu Cys Phe
      35             40             45
Leu Phe His Gly Ile His Glu Asn Leu Leu Thr Val Gly Val Ser Lys
      50             55             60
Glu Ala Tyr Leu Met Thr Ser Val Asn Gly Lys Asn Lys Thr Lys Met
      65             70             75             80
Leu Tyr Gly Gln Ser His Lys Gly Lys Asp
      85             90

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<210> 6169

<211> 720

<212> DNA

<213> Homo sapiens

<400> 6169

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gctagccaaa aggcttcct ctgtgtgttg cagtccctgtg gcattatgca tgccccctcc
120
cagtgacccc aggcttttta tggctgtgaa acacgttaaa atttcagggt aagacgtgac
180
cttttgaggt gactataact gaagattgct ttacagaagc caaaaaaggt tttttgagtc
240
atgatgcaag aatctgggac tgagacaaaa agtaacgggt cagccatcca gaatgggtcg
300
ggcggcgagc accacttact agagtgcggc ggtcttcggg aggggcggtc caacggagag
360
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420
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480
tcaagccctt gggagttgga agtctctcag gtcccttggt gggagcagtt gctgagacga
540
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600
gagaaatggt tcccactgct ttcatgcaaa aataaaaatt aaacgaaaaa cagcttaagc
660
ctgtgaagaa ggaaatactg agctagccag caaaagagag aaagaagagg aggggagagg
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<210> 6170

<211> 101

<212> PRT

<213> Homo sapiens

<400> 6170

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Met Met Gln Glu Ser Gly Thr Glu Thr Lys Ser Asn Gly Ser Ala Ile

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Gln Asn Gly Ser Gly Gly Ser Asn His Leu Leu Glu Cys Gly Gly Leu			
20	25	30	
Arg Glu Gly Arg Ser Asn Gly Glu Thr Pro Ala Val Asp Ile Gly Ala			
35	40	45	
Ala Asp Leu Ala His Ala Gln Gln Gln Gln Gln Trp His Leu Ile			
50	55	60	
Asn His Gln Pro Ser Arg Ser Pro Ser Ser Trp Leu Lys Arg Leu Ile			
65	70	75	80
Ser Ser Pro Trp Glu Leu Glu Val Leu Gln Val Pro Cys Gly Glu Gln			
85	90	95	
Leu Leu Arg Arg Arg			
100			

<210> 6171

<211> 1130

<212> DNA

<213> Homo sapiens

<400> 6171

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120
tatgaggtga acccacggac cacagagatt ttacatcacc tttcagaacg caacagggtc
180
cgggacaggg atgtctacct ggtaatagag gacttgaagc agaaagcaag tgaatacgag
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360
acaaaggata cctcgtctagc tagttttatc cctgcagtga atgatttgac ctctgatctc
420
tttcgtacca aatccaaaag tgaagaaatc aagattgaac tggaaaaact tgaaaaaat
480
ttaactgcaa ctttagtatt agaaaaatgt ctacaagagg atgtcaagaa agcagagttg
540
catctgtcta cagaaagggc caaagttgat aatcgtcgtc agaacatgga ctttctaaaa
600
gcaaagtcag aggaattcag atttgaatc aaggctgcag aggagcaact ttcagccaga
660
ggcatggatg cttctctgtc tcatcagtc ttagtagcac tatcagagaa actggcaaga
720
ttaagcaac agactatacc tttgaagaaa aaattggagt cctattttaga cttaatgccg
780
aatcgtctc ttgctcaagt gaaaattgaa gaagcaaagc gagaactaga tagcattgaa
840
gctgaactta caagaagagt agacatgatg gaactgtgac aaaagccaaa taaacatcct
900
tttccctaac aaagtaaatt gaataggact ttacagagtt ctttttctc ttggcatttc
960
ctaataacaa aactttctgt gttcttagat tacagaatat cataattgat agaatatggt
1020

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ttcttactgt gtgttgccatt tttgtgccca aatacatagt tttcatatta aaaagccttt
1080

tctcttataaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa
1130

<210> 6172

<211> 292

<212> PRT

<213> Homo sapiens

<400> 6172

Xaa Pro Leu Gly Val Pro Ser Lys Val Ala Gly Ala Ala Ala Met Glu
1 5 10 15
Pro Gln Glu Glu Arg Glu Thr Gln Val Ala Ala Trp Leu Lys Lys Ile
20 25 30
Phe Gly Asp His Pro Ile Pro Gln Tyr Glu Val Asn Pro Arg Thr Thr
35 40 45
Glu Ile Leu His His Leu Ser Glu Arg Asn Arg Val Arg Asp Arg Asp
50 55 60
Val Tyr Leu Val Ile Glu Asp Leu Lys Gln Lys Ala Ser Glu Tyr Glu
65 70 75 80
Ser Glu Ala Lys Tyr Leu Gln Asp Leu Leu Met Glu Ser Val Asn Phe
85 90 95
Ser Pro Ala Asn Leu Ser Ser Thr Gly Ser Arg Tyr Leu Asn Ala Leu
100 105 110
Val Asp Ser Ala Val Ala Leu Glu Thr Lys Asp Thr Ser Leu Ala Ser
115 120 125
Phe Ile Pro Ala Val Asn Asp Leu Thr Ser Asp Leu Phe Arg Thr Lys
130 135 140
Ser Lys Ser Glu Glu Ile Lys Ile Glu Leu Glu Lys Leu Glu Lys Asn
145 150 155 160
Leu Thr Ala Thr Leu Val Leu Glu Lys Cys Leu Gln Glu Asp Val Lys
165 170 175
Lys Ala Glu Leu His Leu Ser Thr Glu Arg Ala Lys Val Asp Asn Arg
180 185 190
Arg Gln Asn Met Asp Phe Leu Lys Ala Lys Ser Glu Glu Phe Arg Phe
195 200 205
Gly Ile Lys Ala Ala Glu Glu Gln Leu Ser Ala Arg Gly Met Asp Ala
210 215 220
Ser Leu Ser His Gln Ser Leu Val Ala Leu Ser Glu Lys Leu Ala Arg
225 230 235 240
Leu Lys Gln Gln Thr Ile Pro Leu Lys Lys Lys Leu Glu Ser Tyr Leu
245 250 255
Asp Leu Met Pro Asn Pro Ser Leu Ala Gln Val Lys Ile Glu Glu Ala
260 265 270
Lys Arg Glu Leu Asp Ser Ile Glu Ala Glu Leu Thr Arg Arg Val Asp
275 280 285
Met Met Glu Leu
290

<210> 6173

<211> 1483

<212> DNA

<213> Homo sapiens

<400> 6173

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120
caaggcctgt tgatgcagcc atgggcgtgg ctacagcttg cagagaactc cctcttggcc
180
aaggttttta tcaccaagca gggctatgcc ttgttggttt cagatcttca acagggtgtg
240
catgaacagg tggacactag tgtggtcagc cagcgagcca aggagctgaa caagcggctc
300
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360
gacgtgctc accctagcga agctacctc tctgtgatt gtgtggcaga tgcactgatt
420
ctacgggtgc gaagtgaact ctctggcctc ccttctatt ggaatttcca ctgcatgcta
480
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<210> 6174

<211> 299

<212> PRT

<213> Homo sapiens

<400> 6174

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      20          25          30
Gly Tyr Ala Leu Leu Val Ser Asp Leu Gln Gln Val Trp His Glu Gln
      35          40          45
Val Asp Thr Ser Val Val Ser Gln Arg Ala Lys Glu Leu Asn Lys Arg
      50          55          60
Leu Thr Ala Pro Pro Ala Ala Phe Leu Cys His Leu Asp Asn Leu Leu
      65          70          75          80
Arg Pro Leu Leu Lys Asp Ala Ala His Pro Ser Glu Ala Thr Phe Ser
      85          90          95
Cys Asp Cys Val Ala Asp Ala Leu Ile Leu Arg Val Arg Ser Glu Leu
      100          105          110
Ser Gly Leu Pro Phe Tyr Trp Asn Phe His Cys Met Leu Ala Ser Pro
      115          120          125
Ser Leu Val Ser Gln His Leu Ile Arg Pro Leu Met Gly Met Ser Leu
      130          135          140
Ala Leu Gln Cys Gln Val Arg Glu Leu Ala Thr Leu Leu His Met Lys
      145          150          155          160
Asp Leu Glu Ile Gln Asp Tyr Gln Glu Ser Gly Ala Thr Leu Ile Arg
      165          170          175
Asp Arg Leu Lys Thr Glu Pro Phe Glu Glu Asn Ser Phe Leu Glu Gln
      180          185          190
Phe Met Ile Glu Lys Leu Pro Glu Ala Cys Ser Ile Gly Asp Gly Lys
      195          200          205
Pro Phe Val Met Asn Leu Gln Asp Leu Tyr Met Ala Val Thr Thr Gln
      210          215          220
Glu Val Gln Val Gly Gln Lys His Gln Gly Ala Gly Asp Pro His Thr
      225          230          235          240
Ser Asn Ser Ala Ser Leu Gln Gly Ile Asp Ser Gln Cys Val Asn Gln
      245          250          255
Pro Glu Gln Leu Val Ser Ser Ala Pro Thr Leu Ser Ala Pro Glu Lys
      260          265          270
Glu Ser Thr Gly Thr Ser Gly Pro Leu Gln Arg Pro Gln Leu Ser Lys
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Val Lys Arg Lys Asn Pro Arg Gly Leu Phe Ser
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<210> 6175

<211> 349

<212> DNA

<213> Homo sapiens

<400> 6175

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120

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acaaatgact ttgagttggt gaagaaccag ctgtagatc cagacataaa gagattgcct
240
tggttgaata gaagtcaaac agtagtgga gagtatttgg cttttcttgg taatcttgta
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<210> 6176

<211> 90

<212> PRT

<213> Homo sapiens

<400> 6176

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Val	Gln	Phe	Gly	Gly	Thr	Val	Thr	Glu	Val	Leu	Leu	Lys	Tyr	Lys	Lys
			20					25					30		
Gly	Glu	Thr	Asn	Asp	Phe	Glu	Leu	Leu	Lys	Asn	Gln	Leu	Leu	Asp	Pro
			35				40					45			
Asp	Ile	Lys	Arg	Leu	Pro	Trp	Leu	Asn	Arg	Ser	Gln	Thr	Val	Val	Glu
	50					55				60					
Glu	Tyr	Leu	Ala	Phe	Leu	Gly	Asn	Leu	Val	Ser	Ala	Gln	Thr	Val	Phe
65					70				75					80	
Leu	Arg	Pro	Cys	Leu	Ser	Met	Ile	Ala	Ser						
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<210> 6177

<211> 1536

<212> DNA

<213> Homo sapiens

<400> 6177

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<210> 6178

<211> 310

<212> PRT

<213> Homo sapiens

<400> 6178

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Ser	Gly	Gly	Phe	Gln	Val	Lys	Leu	Tyr	Asp	Ile	Glu	Gln	Gln	Gln	Ile
			20					25					30		
Arg	Asn	Ala	Leu	Glu	Asn	Ile	Arg	Lys	Glu	Met	Lys	Leu	Leu	Glu	Gln
		35					40				45				
Ala	Gly	Ser	Leu	Lys	Gly	Ser	Leu	Ser	Val	Glu	Glu	Gln	Leu	Ser	Leu
	50					55				60					
Ile	Ser	Gly	Cys	Pro	Asn	Ile	Gln	Glu	Ala	Val	Glu	Gly	Ala	Met	His
65				70					75					80	
Ile	Gln	Glu	Cys	Val	Pro	Glu	Asp	Leu	Glu	Leu	Lys	Lys	Lys	Ile	Phe
			85					90						95	
Ala	Gln	Leu	Asp	Ser	Ile	Ile	Asp	Asp	Arg	Val	Ile	Leu	Ser	Ser	Ser
			100					105				110			
Thr	Ser	Cys	Leu	Met	Pro	Ser	Lys	Leu	Phe	Ala	Gly	Leu	Val	His	Val

115	120	125
Lys Gln Cys Ile Val Ala His Pro Val Asn Pro Pro Tyr Tyr Ile Pro		
130	135	140
Leu Val Glu Leu Val Pro His Pro Glu Thr Ala Pro Thr Thr Val Asp		
145	150	155
Arg Thr His Ala Leu Met Lys Lys Ile Gly Xaa Val Pro His Ala Ser		
165	170	175
Pro Glu Gly Gly Gly Arg Leu Arg Ser Glu Pro Pro Ala Ile Cys Asn		
180	185	190
His Gln Arg Gly Leu Ala Ala Ser Gly Gly Arg Asn Xaa Cys Leu Leu		
195	200	205
Val Thr Trp Xaa Leu Val Met Ser Glu Gly Leu Gly Met Arg Tyr Ala		
210	215	220
Phe Ile Gly Pro Leu Glu Thr Met His Leu Asn Ala Glu Gly Met Leu		
225	230	235
Ser Tyr Cys Asp Arg Tyr Ser Glu Gly Ile Lys His Val Leu Gln Thr		
245	250	255
Phe Gly Pro Ile Pro Glu Phe Ser Arg Ala Thr Ala Glu Lys Val Asn		
260	265	270
Gln Asp Met Cys Met Lys Val Pro Asp Asp Pro Glu His Leu Ala Ala		
275	280	285
Arg Arg Gln Trp Arg Asp Glu Cys Leu Met Arg Leu Ala Lys Leu Lys		
290	295	300
Ser Gln Val Gln Pro Gln		
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<210> 6179

<211> 2940

<212> DNA

<213> Homo sapiens

<400> 6179

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660

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<210> 6180

<211> 751

<212> PRT

<213> Homo sapiens

<400> 6180

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			20					25					30		
Trp	Arg	Xaa	Tyr	Leu	Thr	Asp	Glu	Phe	Ala	Lys	Gly	Arg	Lys	Val	Ala
		35				40						45			
Asp	Leu	Tyr	Glu	Leu	Val	Gln	Tyr	Ala	Gly	Asn	Ile	Ile	Pro	Arg	Leu
	50					55					60				
Tyr	Leu	Leu	Ile	Thr	Val	Gly	Val	Val	Tyr	Val	Lys	Ser	Phe	Pro	Gln
65					70					75					80
Ser	Arg	Lys	Asp	Ile	Leu	Lys	Asp	Leu	Val	Glu	Met	Cys	Arg	Gly	Val
			85						90					95	
Gln	His	Pro	Leu	Arg	Gly	Leu	Phe	Leu	Arg	Asn	Tyr	Leu	Leu	Gln	Cys
			100						105					110	
Thr	Arg	Asn	Ile	Leu	Pro	Asp	Glu	Gly	Glu	Pro	Thr	Asp	Glu	Glu	Thr
		115					120						125		
Thr	Gly	Asp	Ile	Ser	Asp	Ser	Met	Asp	Phe	Val	Leu	Leu	Asn	Phe	Ala
	130					135					140				
Glu	Met	Asn	Lys	Leu	Trp	Val	Arg	Met	Gln	His	Gln	Gly	His	Ser	Arg
145				150						155					160
Asp	Arg	Glu	Lys	Arg	Glu	Arg	Glu	Arg	Gln	Glu	Leu	Arg	Ile	Leu	Val
			165						170					175	
Gly	Thr	Asn	Leu	Val	Arg	Leu	Ser	Xaa	Ser	Trp	Arg	Cys	Lys	Cys	Gly
			180					185					190		
Thr	Leu	Gln	Gln	Ile	Val	Leu	Thr	Gly	Ile	Leu	Glu	Gln	Val	Val	Asn

195	200	205
Cys Arg Asp Ala Leu Ala Gln Glu Tyr Leu Met Glu Cys Ile Ile Gln		
210	215	220
Val Phe Pro Asp Glu Phe His Leu Gln Thr Leu Asn Pro Phe Leu Arg		
225	230	235
Ala Cys Ala Glu Leu His Gln Asn Val Asn Val Lys Asn Ile Ile Ile		
245	250	255
Ala Leu Ile Asp Arg Leu Ala Leu Phe Ala His Arg Glu Asp Gly Pro		
260	265	270
Gly Ile Pro Ala Asp Ile Lys Leu Phe Asp Ile Phe Ser Gln Gln Val		
275	280	285
Ala Thr Val Ile Gln Ser Arg Gln Asp Met Pro Ser Glu Asp Val Val		
290	295	300
Ser Leu Gln Val Ser Leu Ile Asn Leu Ala Met Lys Cys Tyr Pro Asp		
305	310	315
Arg Val Asp Tyr Val Asp Lys Val Leu Glu Thr Thr Val Glu Ile Phe		
325	330	335
Asn Lys Leu Asn Leu Glu His Ile Ala Thr Ser Ser Ala Val Ser Lys		
340	345	350
Glu Leu Thr Arg Leu Leu Lys Ile Pro Val Asp Thr Tyr Asn Asn Ile		
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Leu Thr Val Leu Lys Leu Lys His Phe His Pro Leu Phe Glu Tyr Phe		
370	375	380
Asp Tyr Glu Ser Arg Lys Ser Met Ser Cys Tyr Val Leu Ser Asn Val		
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Leu Asp Tyr Asn Thr Glu Ile Val Ser Gln Asp Gln Val Asp Ser Ile		
405	410	415
Met Asn Leu Val Ser Thr Leu Ile Gln Asp Gln Pro Asp Gln Pro Val		
420	425	430
Glu Asp Pro Asp Pro Glu Asp Phe Ala Asp Glu Gln Ser Leu Val Gly		
435	440	445
Arg Phe Ile His Leu Leu Arg Ser Glu Asp Pro Asp Gln Gln Tyr Leu		
450	455	460
Ile Leu Asn Thr Ala Arg Lys His Phe Gly Ala Gly Gly Asn Gln Arg		
465	470	475
Ile Arg Phe Thr Leu Pro Pro Leu Val Phe Ala Ala Tyr Gln Leu Ala		
485	490	495
Phe Arg Tyr Lys Glu Asn Ser Lys Trp Met Thr Asn Gly Lys Arg Asn		
500	505	510
Ala Arg Arg Phe Phe His Leu Pro Xaa Gln Thr Ile Ser Ala Leu Ile		
515	520	525
Lys Ala Glu Leu Ala Glu Leu Pro Leu Arg Leu Phe Leu Gln Gly Ala		
530	535	540
Leu Ala Ala Gly Glu Ile Gly Phe Glu Asn His Glu Thr Val Ala Tyr		
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Glu Phe Met Ser Gln Ala Phe Ser Leu Tyr Glu Asp Glu Ile Ser Asp		
565	570	575
Ser Lys Ala Gln Leu Ala Ala Ile Thr Leu Ile Ile Gly Thr Phe Glu		
580	585	590
Arg Met Lys Cys Phe Ser Glu Glu Asn His Glu Pro Leu Arg Thr Gln		
595	600	605
Cys Ala Leu Ala Ala Ser Lys Leu Leu Lys Lys Pro Asp Gln Gly Arg		
610	615	620
Ala Glu His Leu Cys Thr Ser Leu Trp Ser Gly Arg Asn Thr Asp Lys		

625		630		635		640
Asn Gly Glu Glu Leu His Gly Gly Lys Arg Val Met Glu Cys Leu Lys						
	645		650		655	
Lys Ala Leu Lys Ile Ala Asn Gln Cys Met Asp Pro Ser Leu Gln Val						
	660		665		670	
Gln Leu Phe Ile Glu Ile Leu Asn Arg Tyr Ile Tyr Phe Tyr Glu Lys						
	675		680		685	
Glu Asn Asp Ala Val Thr Ile Gln Val Leu Asn Gln Leu Ile Gln Lys						
	690		695		700	
Ile Arg Glu Asp Leu Pro Asn Leu Glu Ser Ser Glu Glu Thr Glu Gln						
705		710		715		720
Ile Asn Lys His Phe His Asn Thr Leu Glu His Leu Arg Leu Arg Arg						
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<210> 6181

<211> 1135

<212> DNA

<213> Homo sapiens

<400> 6181

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<210> 6182

<211> 236

<212> PRT

<213> Homo sapiens

<400> 6182

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Glu	Val	Phe	Phe	Leu	Pro	Asp	Leu	Pro	Thr	Thr	Pro	Tyr	Phe	Ser	Arg
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Asp	Ala	Gln	Lys	His	Asp	Val	Glu	Val	Leu	Glu	Arg	Asn	Phe	Gln	Thr
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			85					90					95		
Thr	Phe	Tyr	Leu	Val	Asn	Gln	Gly	Val	Cys	Val	Pro	Arg	Asn	Cys	Arg
			100					105					110		
Lys	Cys	Pro	Arg	Thr	Tyr	Arg	Leu	Leu	Gly	Ser	Leu	Arg	Thr	Cys	Ile
		115					120					125			
Gly	Asn	Asn	Val	Phe	Gly	Asn	Ala	Cys	Ile	Ser	Val	Leu	Ser	Pro	Gly
	130					135					140				
Thr	Val	Ile	Thr	Glu	His	Tyr	Gly	Pro	Thr	Asn	Ile	Arg	Ile	Arg	Cys
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His	Leu	Gly	Leu	Lys	Thr	Pro	Asn	Gly	Cys	Glu	Leu	Val	Val	Gly	Gly
				165				170					175		
Glu	Pro	Gln	Cys	Trp	Ala	Glu	Gly	Arg	Cys	Leu	Leu	Phe	Asp	Asp	Ser
			180					185					190		
Phe	Leu	His	Ala	Ala	Phe	His	Glu	Gly	Ser	Ala	Glu	Asp	Gly	Pro	Arg
		195					200					205			
Val	Val	Phe	Met	Val	Asp	Leu	Trp	His	Pro	Asn	Val	Ala	Ala	Ala	Glu
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<210> 6183

<211> 2530

<212> DNA

<213> Homo sapiens

<400> 6183

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<210> 6184

<211> 308

<212> PRT

<213> Homo sapiens

<400> 6184

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		20						25				30			
Gly	Met	Gly	Asn	Arg	Gly	Gly	Phe	Arg	Gly	Gly	Phe	Gly	Ser	Gly	Ile
		35					40				45				
Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly	Arg	Gly
		50				55				60					
Ala	Arg	Gly	Gly	Lys	Ala	Glu	Asp	Lys	Glu	Trp	Met	Pro	Val	Thr	Lys
65				70				75					80		
Leu	Gly	Arg	Leu	Val	Lys	Asp	Met	Lys	Ile	Lys	Ser	Leu	Glu	Glu	Ile
			85					90					95		
Tyr	Leu	Phe	Ser	Leu	Pro	Ile	Lys	Glu	Ser	Glu	Ile	Ile	Asp	Phe	Phe
		100					105				110				
Leu	Gly	Ala	Ser	Leu	Lys	Asp	Glu	Val	Leu	Lys	Ile	Met	Pro	Val	Gln
		115				120					125				
Lys	Gln	Thr	Arg	Ala	Gly	Gln	Arg	Thr	Arg	Phe	Lys	Ala	Phe	Val	Ala
		130				135					140				
Ile	Gly	Asp	Tyr	Asn	Gly	His	Val	Gly	Leu	Gly	Val	Lys	Cys	Ser	Lys

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<210> 6185
<211> 1231
<212> DNA
<213> Homo sapiens
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240
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300
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360
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780

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<210> 6186

<211> 133

<212> PRT

<213> Homo sapiens

<400> 6186

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 35 40 45
 Ala Gln Leu Ser His Cys Lys Ser Leu Gly His Phe Glu Asn Leu Gln
 50 55 60
 Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
 65 70 75 80
 Arg Arg Cys Ala Ile Asn Ala Arg Asn Ala Leu Thr Ala Leu Phe Thr
 85 90 95
 Ser Ser Gly Arg Pro Pro Ser Gln Pro Asn Thr Gln Asp Lys Thr Pro
 100 105 110
 Ser Lys Val Thr Ala Arg Pro Ser Gln Pro Pro Leu Pro Arg Arg Ser
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 Thr Arg Leu Lys Thr
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<210> 6187

<211> 909

<212> DNA

<213> Homo sapiens

<400> 6187

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 gtcacagcag cactgttact gggctctcatg atgggtgtca ctggagacga ggatgagaac
 180

agcccggtg cccatgaggc cctcttgga caggacaccc tcttttgcca gggccttgaa
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 420
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 660
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 720
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 780
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 909

<210> 6188

<211> 227

<212> PRT

<213> Homo sapiens

<400> 6188

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			20					25					30		
Glu	Ala	Leu	Leu	Asp	Glu	Asp	Thr	Leu	Phe	Cys	Gln	Gly	Leu	Glu	Val
	35						40					45			
Phe	Tyr	Pro	Glu	Leu	Gly	Asn	Ile	Gly	Cys	Lys	Val	Val	Pro	Asp	Cys
	50					55					60				
Asn	Asn	Tyr	Arg	Gln	Lys	Ile	Thr	Ser	Trp	Met	Glu	Pro	Ile	Val	Lys
65					70				75					80	
Phe	Pro	Gly	Ala	Val	Tyr	Gly	Ala	Thr	Tyr	Ile	Leu	Val	Met	Val	Asp
			85						90					95	
Pro	Asp	Ala	Pro	Ser	Arg	Ala	Glu	Pro	Arg	Gln	Arg	Phe	Trp	Arg	His
			100					105					110		
Trp	Leu	Val	Thr	Asp	Ile	Lys	Gly	Ala	Asp	Leu	Lys	Lys	Gly	Lys	Ile
	115						120					125			
Gln	Gly	Gln	Glu	Leu	Ser	Ala	Tyr	Gln	Ala	Pro	Ser	Pro	Pro	Ala	His
	130					135					140				
Ser	Gly	Phe	His	Arg	Tyr	Gln	Phe	Phe	Val	Tyr	Leu	Gln	Glu	Gly	Lys
145					150				155					160	
Val	Ile	Ser	Leu	Leu	Pro	Lys	Glu	Asn	Lys	Thr	Arg	Gly	Ser	Trp	Lys

				165						170					175
Met	Asp	Arg	Phe	Leu	Asn	Arg	Phe	His	Leu	Gly	Glu	Pro	Glu	Ala	Ser
			180					185					190		
Thr	Gln	Phe	Met	Thr	Gln	Asn	Tyr	Gln	Asp	Ser	Pro	Thr	Leu	Gln	Ala
		195					200					205			
Pro	Arg	Glu	Arg	Ala	Ser	Glu	Pro	Lys	His	Lys	Asn	Gln	Ala	Glu	Ile
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Ala	Ala	Cys													
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<210> 6189

<211> 2761

<212> DNA

<213> Homo sapiens

<400> 6189

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<210> 6190

<211> 576

<212> PRT

<213> Homo sapiens

<400> 6190

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 35 40 45
 Asn Asn Leu Asn Val Glu Glu Asn Ser Ser Gly Asp Gln Arg Arg Ala
 50 55 60
 Pro Leu Ala Ala Gly Thr Trp Arg Ser Ala Pro Val Pro Val Thr Thr
 65 70 75 80
 Gln Asn Pro Pro Gly Ala Pro Pro Asn Val Leu Trp Gln Thr Pro Leu
 85 90 95
 Ala Trp Gln Asn Pro Ser Gly Trp Gln Asn Gln Thr Ala Arg Gln Thr
 100 105 110
 Pro Pro Ala Arg Gln Ser Pro Pro Ala Arg Gln Thr Pro Pro Ala Trp
 115 120 125
 Gln Thr Gln Asn Pro Val Ala Trp Gln Asn Pro Val Ile Trp Pro Asn
 130 135 140
 Pro Val Ile Trp Gln Asn Pro Val Ile Trp Pro Asn Pro Ile Val Trp
 145 150 155 160
 Pro Gly Pro Val Val Trp Pro Asn Pro Leu Ala Trp Gln Asn Pro Pro
 165 170 175
 Gly Trp Gln Thr Pro Pro Gly Trp Gln Thr Pro Pro Gly Trp Gln Gly
 180 185 190
 Pro Pro Asp Trp Gln Gly Pro Pro Asp Trp Pro Leu Pro Pro Asp Trp
 195 200 205
 Pro Leu Pro Pro Asp Trp Pro Leu Pro Thr Asp Trp Pro Leu Pro Pro
 210 215 220
 Asp Trp Ile Pro Ala Asp Trp Pro Ile Pro Pro Asp Trp Gln Asn Leu
 225 230 235 240
 Arg Pro Ser Pro Asn Leu Arg Pro Ser Pro Asn Ser Arg Ala Ser Gln
 245 250 255
 Asn Pro Gly Ala Ala Gln Pro Arg Asp Val Ala Leu Leu Gln Glu Arg
 260 265 270
 Ala Asn Lys Leu Val Lys Tyr Leu Met Leu Lys Asp Tyr Thr Lys Val
 275 280 285
 Pro Ile Lys Arg Ser Glu Met Leu Arg Asp Ile Ile Arg Glu Tyr Thr
 290 295 300
 Asp Val Tyr Pro Glu Ile Ile Glu Arg Ala Cys Phe Val Leu Glu Lys
 305 310 315 320
 Lys Phe Gly Ile Gln Leu Lys Glu Ile Asp Lys Glu Glu His Leu Tyr
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 Ile Leu Ile Ser Thr Pro Glu Ser Leu Ala Gly Ile Leu Gly Thr Thr
 340 345 350
 Lys Asp Thr Pro Lys Leu Gly Leu Leu Leu Val Ile Leu Gly Val Ile

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Arg Lys Met Gly Leu Arg	Pro Gly Val Arg His	Pro Leu Leu Gly Asp
385	390	395
Leu Arg Lys Leu Leu Thr	Tyr Glu Phe Val Lys	Gln Lys Tyr Leu Asp
405	410	415
Tyr Arg Arg Val Pro Asn	Ser Asn Pro Pro Glu	Tyr Glu Phe Leu Trp
420	425	430
Gly Leu Arg Ser Tyr His	Glu Thr Ser Lys Met	Lys Val Leu Arg Phe
435	440	445
Ile Ala Glu Val Gln Lys	Arg Asp Pro Arg Asp	Trp Thr Ala Gln Phe
450	455	460
Met Glu Ala Ala Asp Glu	Ala Leu Asp Ala Ala	Ala Ala Ala
465	470	475
Glu Ala Glu Ala Arg Ala	Glu Ala Arg Thr Arg	Met Gly Ile Gly Asp
485	490	495
Glu Ala Val Ser Gly Pro	Trp Ser Trp Asp Asp	Ile Glu Phe Glu Leu
500	505	510
Leu Thr Trp Asp Glu Glu	Gly Asp Phe Gly Asp	Pro Trp Ser Arg Ile
515	520	525
Pro Phe Thr Phe Trp Ala	Arg Tyr His Gln Asn	Ala Arg Ser Arg Phe
530	535	540
Pro Gln Thr Phe Ala Gly	Pro Ile Ile Gly Pro	Gly Gly Thr Ala Ser
545	550	555
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<210> 6191

<211> 3021

<212> DNA

<213> Homo sapiens

<400> 6191

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<210> 6192

<211> 815

<212> PRT

<213> Homo sapiens

<400> 6192

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		100						105					110		
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Asp Leu Tyr Asp Val Leu Ala Lys Glu Pro Val Gln Arg Asn Asn Asp						
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Lys Thr Asp Thr Gly Met Pro Ala Thr Gly Ser Ala Gly Thr Gln Glu						
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Glu Leu Leu Arg Trp Cys Gln Glu Gln Thr Ala Gly Tyr Pro Gly Val						
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His Val Ser Asp Leu Ser Ser Ser Trp Ala Asp Gly Leu Ala Leu Cys						
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Ala Leu Val Tyr Arg Leu Gln Pro Gly Leu Leu Glu Pro Ser Glu Leu						
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Gln Gly Leu Gly Ala Leu Glu Ala Thr Ala Trp Ala Leu Lys Val Ala						
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Glu Asn Glu Leu Gly Ile Thr Pro Val Val Ser Ala Gln Ala Val Val						
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Ala Gly Ser Asp Pro Leu Gly Leu Ile Ala Tyr Leu Ser His Phe His						
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Ser Pro Gly Thr Ser Ser Ala Val Leu Phe Leu Ser Lys Leu Gln Arg						
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Thr Leu Gln Arg Ser Arg Ala Lys Asp Leu Leu Gln Glu Asn Ala Glu						
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Asp Ala Gly Gly Lys Lys Leu Arg Leu Glu Met Glu Ala Glu Thr Pro						
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Ser Thr Glu Val Pro Pro Asp Pro Glu Pro Gly Val Pro Leu Thr Pro						
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Pro Ser Gln His Gln Glu Ala Gly Ala Gly Asp Leu Cys Ala Leu Cys						
	435		440		445	
Gly Glu His Leu Tyr Val Leu Glu Arg Leu Cys Val Asn Gly His Phe						
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Phe His Arg Ser Cys Phe Arg Cys His Thr Cys Glu Ala Thr Leu Trp						
	465		470		475	480
Pro Gly Gly Tyr Glu Gln His Pro Gly Asp Gly His Phe Tyr Cys Leu						
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Gln His Leu Pro Gln Thr Asp His Lys Ala Glu Gly Ser Asp Arg Gly						
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Pro Glu Ser Pro Glu Leu Pro Thr Pro Ser Glu Asn Ser Met Pro Pro						
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Asp Pro Ser Gln Pro Thr Arg Arg Gln Ile Arg Leu Ser Ser Pro Glu						
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Arg Gln Arg Leu Ser Ser Leu Asn Leu Thr Pro Asp Pro Glu Met Glu						
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Gln	Leu	Leu	Gln	Leu	Val	Asp	Lys	Lys	Asn	Ser	Leu	Val	Ala	Glu	Glu
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Ala	Glu	Leu	Met	Ile	Thr	Val	Gln	Glu	Leu	Asn	Leu	Glu	Glu	Lys	Gln
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	755					760					765				
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<210> 6193

<211> 2893

<212> DNA

<213> Homo sapiens

<400> 6193

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240

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300

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<211> 621

<212> PRT

<213> Homo sapiens

<400> 6194

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Asn	Thr	His	Arg	Ala	Ile	Glu	Ser	Asn	Ser	Gln	Thr	Ser	Pro	Leu	Asn
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Ala	Glu	Val	Val	Gln	Tyr	Ala	Lys	Glu	Val	Val	Asp	Phe	Ser	Ser	His
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Tyr	Gly	Ser	Glu	Asn	Ser	Met	Ser	Tyr	Thr	Met	Trp	Asn	Leu	Ala	Gly
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Val	Pro	Asn	Val	Phe	Pro	Ser	Ser	Gly	Asp	Phe	Thr	Gln	Thr	Ala	Val
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<210> 6195
 <211> 518
 <212> DNA
 <213> Homo sapiens

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<210> 6196
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<400> 6196
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 35 40 45
 Gln Val His Pro Asn Ser Ser Leu Ala Gln Lys Trp Cys Tyr Ile His
 50 55 60
 Trp Glu Gln Thr Cys Ile Pro Thr Pro Arg His Val Thr Thr Gly Thr
 65 70 75 80
 Ala Asn Glu Leu Cys Pro Gly Asn Ser Phe Thr Pro Ser Ser Cys Ser
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<210> 6197
 <211> 2841

<212> DNA

<213> Homo sapiens

<400> 6197

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<210> 6198

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6198

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Ser	Ser	Gln	His	His	Gly	Leu	Asn	Thr	His	Trp	Ala	Pro	Thr	Leu	Gly
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Pro	Gly	Trp	Gly	Met	Trp	Gly	Gln	Glu	Ala	Ala	Gln	Ser	Gly	Arg	Gln
		50				55					60				
Arg	Glu	Lys	Cys	Val	Gln	Arg	Ala	Pro	Ile	Ser	Gly	Cys	Asn	Val	Val
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Leu	Arg	Leu	Trp	Leu	Gly	Ser	Ala	Ser	Arg	Val	Ser	Tyr	Val	Leu	Cys
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Ser	Tyr	Phe	Leu	Ser	Pro	Thr	Leu	Pro	Cys	Arg	Asn	Pro	Ser	Glu	Tyr
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<210> 6199

<211> 1777

<212> DNA

<213> Homo sapiens

<400> 6199

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<210> 6200

<211> 164

<212> PRT

<213> Homo sapiens

<400> 6200

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		20						25					30		
Pro	Pro	Lys	Pro	Asp	Cys	Gln	Gln	Lys	Pro	Ser	Pro	Ser	Glu	Gly	Gln
		35					40					45			
Val	Gly	Val	Pro	Xaa	Arg	Ser	Pro	His	Pro	Gln	Gly	Gly	Phe	Thr	His
		50				55					60				
Cys	Pro	Val	Pro	Gly	Met	Pro	Gly	Gly	Arg	Pro	Leu	Cys	Cys	Cys	His
65					70				75					80	
Cys	Cys	Gln	His	Cys	Pro	Ala	Cys	Glu	Ala	Arg	Arg	Ser	Pro	Cys	Pro
			85					90					95		
Thr	Arg	Cys	Cys	Cys	Ser	Ser	Asp	Pro	Cys	Cys	Glu	Glu	Trp	Asp	Ser
			100					105					110		
Trp	Ser	Lys	Lys	Leu	Val	Phe	Leu	Phe	Cys	Ile	Asn	Glu	Lys	Asn	Pro
		115					120					125			
Gly	Glu	Ala	Ala	Thr	Leu	Pro	Ser	Gln	Arg	Asp	Ala	Leu	Pro	Cys	Phe
		130				135					140				
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150

155

160

<210> 6201

<211> 604

<212> DNA

<213> Homo sapiens

<400> 6201

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<210> 6202

<211> 124

<212> PRT

<213> Homo sapiens

<400> 6202

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Pro	Ser	Asp	Arg	Met	Arg	Asp	Arg	Asn	Ala	Gln	Gln	Arg	Ala	Ile	Gln
			20					25					30		
Gly	Gln	Trp	Thr	Leu	Gly	Arg	Gly	Ala	Glu	Trp	Ala	Ala	Leu	Arg	Arg
		35				40						45			
Ala	Gly	Leu	Arg	Gly	Cys	Arg	Glu	Glu	Phe	Gly	Gly	Lys	Gly	Gln	Pro
	50					55					60				
Gln	Ser	Leu	Ser	Cys	Ala	Ser	Trp	Glu	Arg	Gly	Met	Thr	Gly	Arg	His
65					70					75				80	
Thr	Asn	Val	Ser	Gln	Gly	Arg	Trp	Ala	Trp	Gly	His	Arg	Ala	Pro	Arg
				85				90					95		
Gly	Gly	Ser	Gly	Glu	Gly	Glu	Pro	Ala	Glu	Glu	Arg	Pro	Gly	Arg	Ala
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Gly	Asp	His	Ala	Gly	Ala	Gln	Gly	Glu	Arg	Gln	Asp				

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120

<210> 6203

<211> 3462

<212> DNA

<213> Homo sapiens

<400> 6203

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<210> 6204

<211> 486

<212> PRT

<213> Homo sapiens

<400> 6204

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			20					25					30		
Asp	Gly	His	Arg	Leu	Cys	Ser	Asp	Leu	Met	Asn	Cys	Leu	His	Glu	Arg
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Arg	Trp	Arg	Gln	Leu	Val	Glu	Lys	Gly	Pro	Gln	Tyr	Gly	Thr	Val	Glu
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Lys	Ala	Trp	Met	Ala	Phe	Met	Ser	Glu	Ala	Glu	Arg	Val	Ser	Glu	Leu
			85					90					95		
His	Leu	Glu	Val	Lys	Ala	Ser	Leu	Met	Asn	Asp	Asp	Phe	Glu	Lys	Ile
		100						105				110			
Lys	Asn	Trp	Gln	Lys	Glu	Ala	Phe	His	Lys	Gln	Met	Met	Gly	Gly	Phe
		115					120					125			
Lys	Glu	Thr	Lys	Glu	Ala	Glu	Asp	Gly	Phe	Arg	Lys	Ala	Gln	Lys	Pro
		130				135					140				
Trp	Ala	Lys	Lys	Leu	Lys	Glu	Val	Glu	Ala	Ala	Lys	Lys	Ala	His	His
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Ala	Ala	Cys	Lys	Glu	Lys	Leu	Ala	Ile	Ser	Arg	Glu	Ala	Asn	Ser	
			165					170					175		
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		180						185					190		
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480

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<210> 6206

<211> 92

<212> PRT

<213> Homo sapiens

<400> 6206

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			20					25					30		
Arg	Glu	Gly	Lys	Glu	Phe	Ala	Asp	Ser	Gln	Lys	Leu	Leu	Phe	Met	Glu
		35					40					45			
Thr	Ser	Ala	Lys	Leu	Asn	His	Gln	Val	Ser	Glu	Val	Phe	Asn	Thr	Val
	50					55					60				
Ala	Gln	Glu	Leu	Leu	Gln	Arg	Ser	Asp	Glu	Glu	Gly	Gln	Ala	Leu	Xaa
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<210> 6207

<211> 1384

<212> DNA

<213> Homo sapiens

<400> 6207

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<211> 290

<212> PRT

<213> Homo sapiens

<400> 6208

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		20						25					30		
Ser	Ala	Gly	Leu	Ser	Leu	Val	Gly	Leu	Leu	Thr	Leu	Gly	Ala	Val	Leu
		35					40					45			
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Phe	Leu	Cys	Phe	Ser	Leu	Ala	Phe	Xaa	Ala	Gln	Val	Gln	Val	Val	Phe
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<213> Homo sapiens

<400> 6210

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			20					25					30		
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Lys	Pro	Pro	Cys	Ser	Glu	Gly	Ser	Pro	Trp	Arg	Cys	Pro	His	Phe	Thr
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Cys	Trp	Val	Leu	Gln	Ala	Arg	Lys	Pro	Gly	Ser	Gly	Gly	Thr	Arg	Glu
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Arg	Gln	Ala	Cys	Val	Trp	Thr	Ser	Ala	Gly	Ala	Ala	Ala	Leu	Arg	Leu
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<211> 2163

<212> DNA

<213> Homo sapiens

<400> 6211

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2160

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2163

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<211> 209

<212> PRT

<213> Homo sapiens

<400> 6212

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 35 40 45
 Ala Phe Glu Gly Ser Tyr Leu Glu Asp Thr Gln Met Tyr Gly Asn Ile
 50 55 60
 Ile Arg Gly Trp Xaa Ser Val Ser Asp Gln Pro Xaa Lys Asn Ser Asn
 65 70 75 80
 Ser Lys Asn Asp Arg Arg Asn Arg Lys Phe Lys Glu Ala Glu Arg Leu
 85 90 95
 Phe Ser Lys Ser Ser Val Thr Ser Ala Ala Ala Val Ser Ala Leu Ala
 100 105 110
 Gly Val Gln Asp Gln Leu Ile Glu Lys Arg Glu Pro Gly Ser Gly Thr
 115 120 125
 Glu Ser Asp Thr Ser Pro Asp Phe His Asn Gln Glu Asn Glu Pro Ser
 130 135 140
 Gln Glu Asp Pro Glu Asp Leu Asp Gly Ser Val Gln Gly Val Lys Pro
 145 150 155 160
 Gln Lys Ala Ala Ser Ser Thr Ser Ser Gly Ser His His Ser Ser His
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<210> 6213

<211> 1160

<212> DNA

<213> Homo sapiens

<400> 6213

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<213> Homo sapiens

<400> 6214

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		35					40					45			
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Val	Met	Met	Glu	Gln	Ile	Arg	Pro	Trp	His	Ser	Arg	Met	Lys	Arg	Arg
	65				70					75				80	
Lys	Gly	Val	Met	Glu	Gly	Gln	Ser	Leu	Glu	Pro	Ala	Ala	Ser	Ser	Gly
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<211> 133

<212> PRT

<213> Homo sapiens

<400> 6218

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Lys Tyr Lys Ala Ala Lys Asn Pro Ser Pro Thr Thr Arg Pro Val Ser
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<212> DNA

<213> Homo sapiens

<400> 6219

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 <211> 179
 <212> PRT
 <213> Homo sapiens

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 35 40 45
 Gly Gly Pro Ala Pro Ser Pro Gln Xaa Tyr Ile His Asp Ser Pro Ser
 50 55 60
 Cys Trp Pro Trp Thr Lys Ala Gly Ser Ser Xaa Cys Pro Val Arg Ser
 65 70 75 80
 Pro Tyr Ser Pro Pro Ala Ala Arg Pro Gly Pro Gly Xaa Pro Leu Trp
 85 90 95
 Cys Gln Arg Val Ser Gln Asn Pro Gly Pro Ser Pro Ser Xaa Gly Pro
 100 105 110
 Leu Pro Ser Pro Arg Pro Val Cys Trp Asp Gly Ala Ser Thr Leu Arg
 115 120 125
 Leu Val Lys Ala Glu Leu Asn Ser Ser Asn Glu Ser Ala Gly Trp Ala
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 Trp Gly Asp Gly Glu Gln Ala Pro Pro Arg Ala Ser Ser Glu Gly Gly
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 <211> 1487
 <212> DNA
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<211> 330

<212> PRT

<213> Homo sapiens

<400> 6222

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			20					25					30		
Lys	Leu	His	Lys	Lys	Cys	Lys	Glu	Phe	Val	Asp	Ser	Cys	Arg	Leu	Thr
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Pro	Thr	Ser	Gly	Asp	Glu	Tyr	Ser	Arg	Gly	Phe	Leu	Gln	Asn	Leu	Asn
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Leu	Ile	Gln	Asp	Gln	Asn	Ala	Gln	Thr	Arg	Trp	Lys	Gln	Gly	Arg	Tyr
65					70					75				80	
Asp	Glu	Asp	Gly	Lys	Pro	Phe	Asn	Gln	Arg	Ser	Leu	Leu	Leu	Gly	His
				85					90					95	
Glu	Arg	Ile	Leu	Thr	Arg	Ala	Lys	Ser	Tyr	Glu	Cys	Ser	Glu	Cys	Gly

	100		105		110										
Lys	Val	Ile	Arg	Arg	Lys	Ala	Trp	Phe	Asp	Gln	His	Gln	Arg	Ile	His
	115				120					125					
Phe	Leu	Glu	Asn	Pro	Phe	Glu	Cys	Lys	Val	Cys	Gly	Gln	Ala	Phe	Arg
	130				135					140					
Gln	Arg	Ser	Ala	Leu	Thr	Val	His	Lys	Gln	Cys	His	Leu	Gln	Asn	Lys
145				150						155				160	
Pro	Tyr	Arg	Cys	His	Asp	Cys	Gly	Lys	Cys	Phe	Arg	Gln	Leu	Ala	Tyr
			165						170					175	
Leu	Val	Glu	His	Lys	Arg	Ile	His	Thr	Lys	Glu	Lys	Pro	Tyr	Lys	Cys
	180							185					190		
Ser	Lys	Cys	Glu	Lys	Thr	Phe	Ser	Gln	Asn	Ser	Thr	Leu	Ile	Arg	His
	195						200					205			
Gln	Val	Ile	His	Ser	Gly	Glu	Lys	Arg	His	Lys	Cys	Leu	Glu	Cys	Gly
	210					215						220			
Lys	Ala	Phe	Gly	Arg	His	Ser	Thr	Leu	Leu	Cys	His	Gln	Gln	Ile	His
225				230						235				240	
Ser	Lys	Pro	Asn	Thr	His	Lys	Cys	Ser	Glu	Cys	Gly	Gln	Ser	Phe	Gly
			245						250				255		
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	260							265					270		
Phe	Phe	Gln	Cys	Gly	Glu	Cys	Gly	Lys	Thr	Phe	Ser	Phe	Lys	Arg	Asn
	275						280					285			
Leu	Phe	Arg	His	Gln	Val	Ile	His	Thr	Gly	Ser	Gln	Leu	Tyr	Gln	Cys
	290					295					300				
Val	Ile	Cys	Gly	Lys	Ser	Phe	Lys	Trp	His	Thr	Ser	Phe	Ile	Lys	His
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<210> 6223

<211> 944

<212> DNA

<213> Homo sapiens

<400> 6223

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<211> 156

<212> PRT

<213> Homo sapiens

<400> 6224

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			20					25					30		
Ala	Glu	Gly	His	Val	Gly	Gln	Gly	Ala	Pro	Gly	Leu	Met	Gly	Asn	Met
		35				40					45				
Asn	Pro	Glu	Gly	Gly	Val	Asn	His	Glu	Asn	Gly	Met	Asn	Arg	Asp	Gly
	50					55					60				
Gly	Met	Ile	Pro	Glu	Gly	Gly	Gly	Asn	Gln	Glu	Pro	Arg	Gln	Gln	
65				70				75					80		
Pro	Gln	Pro	Pro	Pro	Glu	Glu	Pro	Ala	Gln	Ala	Ala	Met	Glu	Gly	Pro
				85				90					95		
Gln	Pro	Glu	Asn	Met	Gln	Pro	Arg	Thr	Arg	Arg	Thr	Lys	Phe	Thr	Leu
			100					105					110		
Leu	Gln	Val	Glu	Glu	Leu	Glu	Ser	Val	Phe	Arg	His	Thr	Gln	Tyr	Pro
		115					120					125			
Asp	Val	Pro	Thr	Arg	Arg	Glu	Leu	Ala	Glu	Asn	Leu	Gly	Val	Thr	Glu
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<210> 6225

<211> 3851

<212> DNA

<213> Homo sapiens

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<211> 246

<212> PRT

<213> Homo sapiens

<400> 6226

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Leu	Glu	Lys	Arg	Ser	Glu	Phe	Arg	Lys	Gln	Pro	Val	Gly	His	Ser	Arg
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Gln	Gly	Asp	Phe	Ile	Lys	Cys	Val	Glu	Gln	Lys	Thr	Asp	Ala	Leu	Gly
		35				40					45				
Lys	Gln	Ser	Val	Asn	Arg	Gly	Phe	Thr	Lys	Asp	Lys	Thr	Leu	Ser	Ser
	50					55					60				
Ile	Phe	Asn	Ile	Glu	Met	Val	Lys	Glu	Lys	Thr	Ala	Glu	Glu	Ile	Lys
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Gln	Ile	Trp	Gln	Gln	Tyr	Phe	Ala	Ala	Lys	Asp	Thr	Val	Tyr	Ala	Val
			85					90						95	
Ile	Pro	Ala	Glu	Lys	Phe	Asp	Leu	Ile	Trp	Asn	Arg	Ala	Gln	Ser	Cys
		100					105					110			
Pro	Thr	Phe	Leu	Cys	Ala	Leu	Pro	Arg	Arg	Glu	Gly	Tyr	Glu	Phe	Phe
		115					120					125			
Val	Gly	Gln	Trp	Thr	Gly	Thr	Glu	Leu	His	Phe	Thr	Ala	Leu	Ile	Asn
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Ile	Gln	Thr	Arg	Gly	Glu	Ala	Ala	Ala	Ser	Gln	Leu	Ile	Leu	Tyr	His
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Tyr	Pro	Glu	Leu	Lys	Glu	Glu	Lys	Gly	Ile	Val	Leu	Met	Thr	Ala	Glu
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Met	Asp	Ser	Thr	Phe	Leu	Asn	Val	Ala	Glu	Ala	Gln	Cys	Ile	Ala	Asn
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Gln	Val	Gln	Leu	Phe	Tyr	Ala	Thr	Asp	Arg	Lys	Glu	Thr	Tyr	Gly	Leu
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Val	Glu	Thr	Phe	Asn	Leu	Arg	Pro	Asn	Glu	Phe	Lys	Tyr	Met	Ser	Val
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Ile	Ala	Glu	Leu	Glu	Gln	Ser	Gly	Leu	Gly	Ala	Glu	Leu	Lys	Cys	Ala
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<210> 6227

<211> 830

<212> DNA

<213> Homo sapiens

<400> 6227

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<210> 6228

<211> 271

<212> PRT

<213> Homo sapiens

<400> 6228

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 20 25 30
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 35 40 45
 Ile Pro Ser Gly Thr Ile Leu Lys Ala Leu Met Glu Gly Gly Glu Asn
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 Gly Pro Trp Met Arg Phe Met Arg Ala Glu Ile Thr Ala Glu Gly Phe
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<210> 6229
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<212> DNA
<213> Homo sapiens
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<212> PRT

<213> Homo sapiens

<400> 6230

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			20					25					30		
Ser	Leu	Val	Ser	Ala	Leu	Asp	Ser	Met	Cys	Ser	Ala	Leu	Ser	Lys	Leu
		35					40					45			
Asn	Ala	Glu	Val	Ala	Cys	Val	Ala	Val	His	Asp	Glu	Ser	Ala	Phe	Val
	50					55				60					
Val	Gly	Thr	Glu	Lys	Gly	Arg	Met	Phe	Leu	Asn	Ala	Arg	Lys	Glu	Leu
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Gln	Ser	Asp	Phe	Leu	Arg	Phe	Cys	Arg	Gly	Pro	Pro	Trp	Lys	Asp	Pro
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Glu	Ala	Glu	His	Pro	Lys	Lys	Val	Gln	Arg	Gly	Glu	Gly	Gly	Gly	Arg
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Ser	Leu	Pro	Arg	Ser	Ser	Leu	Glu	His	Gly	Ser	Asp	Val	Tyr	Leu	Leu
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Gly	Arg	Ala	Ser	Val	Val	Pro	Leu	Pro	Tyr	Glu	Arg	Leu	Leu	Arg	Glu
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5414

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Glu Leu Leu Thr Glu Gly	Val Lys Glu Pro Ile	Val Asp Ser Gln Glu
645	650	655
Arg Asp Ser Gly Asp	Pro Leu Val Asp Glu	Ser Leu Lys Arg Gln Gly
660	665	670
Phe Gln Glu Asn Tyr Asp	Ala Arg Leu Ser Arg	Ile Asp Ile Ala Asn
675	680	685
Thr Leu Arg Glu Gln Val	Gln Asp Leu Phe Asn	Lys Lys Tyr Gly Glu
690	695	700
Ala Leu Gly Ile Lys Tyr	Pro Val Gln Val Pro	Tyr Lys Arg Ile Lys
705	710	715
Ser Asn Pro Gly Ser Val	Ile Ile Glu Gly Leu	Pro Pro Gly Ile Pro
725	730	735
Phe Arg Lys Pro Cys Thr	Phe Gly Ser Gln Asn	Leu Glu Arg Ile Leu
740	745	750
Ala Val Ala Asp Lys Ile	Lys Phe Thr Val Thr	Arg Pro Phe Gln Gly
755	760	765
Leu Ile Pro Lys Pro Asp	Glu Asp Asp Ala Asn	Arg Leu Gly Glu Lys
770	775	780
Val Ile Leu Arg Glu Gln	Val Lys Glu Leu Phe	Asn Glu Lys Tyr Gly
785	790	795
Glu Ala Leu Gly Leu Asn	Arg Pro Val Leu Val	Pro Tyr Lys Leu Ile
805	810	815
Arg Asp Ser Pro Asp Ala	Val Glu Val Thr Gly	Leu Pro Asp Asp Ile
820	825	830
Pro Phe Arg Asn Pro Asn	Thr Tyr Asp Ile His	Arg Leu Glu Lys Ile
835	840	845
Leu Lys Ala Arg Glu His	Val Arg Met Val Ile	Ile Asn Gln Leu Gln
850	855	860
Pro Phe Ala Glu Ile Cys	Asn Asp Ala Lys Val	Pro Ala Lys Asp Ser
865	870	875
Ser Ile Pro Lys Arg Lys	Arg Lys Arg Val Ser	Glu Gly Asn Ser Val
885	890	895
Ser Ser Ser Ser Ser	Ser Ser Ser Ser Ser	Asn Pro Asp Ser
900	905	910
Val Ala Ser Ala Asn Gln	Ile Ser Leu Val Gln	Trp Pro Met Tyr Met
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<210> 6231

<211> 471

<212> DNA

<213> Homo sapiens

<400> 6231

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<211> 138

<212> PRT

<213> Homo sapiens

<400> 6232

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		20						25				30			
Lys	Lys	Ser	Met	Leu	Gly	Gln	Lys	Ser	Gly	Pro	Ser	Gly	Leu	Leu	Thr
		35				40						45			
Trp	Arg	Arg	Lys	Arg	Gly	Pro	Lys	Pro	Pro	Val	Ala	Pro	Ile	Ser	Ile
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Trp	Asn	Gly	Thr	Thr	Pro	Arg	Gly	Glu	Pro	Pro	Pro	Asn	His	Ser	Ser
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Lys	Lys	Gly	Thr	Lys	Lys	Trp	Ala	Leu	Asp	Phe	Ser	Thr	Pro	Glu	Thr
			85					90				95			
Gln	Phe	Pro	Pro	Pro	Gly	Arg	Pro	Phe	Leu	Gly	Ile	Pro	Thr	Trp	Asp
		100						105				110			
Pro	Thr	Trp	Ala	Tyr	Ser	Gly	Pro	Tyr	Leu	Phe	Leu	Val	Gly	Ile	Gly
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<210> 6233

<211> 894

<212> DNA

<213> Homo sapiens

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<211> 230

<212> PRT

<213> Homo sapiens

<400> 6234

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			20					25					30		
Glu	Ala	Leu	Met	Leu	Arg	Asp	Gly	Arg	Phe	Ala	Cys	Ala	Ile	Cys	Pro
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His	Arg	Pro	Val	Leu	Asp	Thr	Leu	Ala	Met	Leu	Thr	Ala	His	Arg	Ala
	50					55					60				
Gly	Lys	Lys	His	Leu	Ser	Ser	Leu	Gln	Leu	Phe	Tyr	Gly	Lys	Lys	Gln
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Pro	Gly	Lys	Glu	Arg	Lys	Gln	Asn	Pro	Lys	His	Gln	Asn	Glu	Leu	Arg
			85					90					95		
Arg	Glu	Glu	Thr	Lys	Ala	Glu	Ala	Pro	Leu	Leu	Thr	Gln	Thr	Arg	Leu
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Ile	Thr	Gln	Ser	Ala	Leu	His	Arg	Ala	Pro	His	Tyr	Asn	Ser	Cys	Cys
		115					120					125			
Arg	Arg	Lys	Tyr	Arg	Pro	Glu	Ala	Pro	Gly	Pro	Ser	Val	Ser	Leu	Ser
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			165					170						175	
Ser	Ala	Pro	Ala	Pro	Met	Ser	Pro	Thr	Arg	Arg	Arg	Ala	Leu	Asp	His
			180					185					190		
Tyr	Leu	Thr	Leu	Arg	Ser	Ser	Gly	Trp	Ile	Pro	Asp	Gly	Arg	Gly	Arg
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230

220

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<210> 6236

<211> 820

<212> PRT

<213> Homo sapiens

<400> 6236

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Ala	Arg	Asp	Pro	Val	Arg	Asp	Phe	Pro	Phe	Glu	Leu	Ile	Pro	Glu	Pro
			20					25					30		
Pro	Glu	Gly	Gly	Leu	Pro	Gly	Pro	Trp	Ala	Leu	His	Arg	Gly	Arg	Lys
		35				40						45			
Lys	Ala	Thr	Gly	Ser	Pro	Val	Ser	Ile	Phe	Val	Tyr	Asp	Val	Lys	Pro
	50					55					60				
Gly	Ala	Glu	Glu	Gln	Thr	Gln	Val	Ala	Lys	Ala	Ala	Phe	Lys	Arg	Phe
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Lys	Thr	Leu	Arg	His	Pro	Asn	Ile	Leu	Ala	Tyr	Ile	Asp	Gly	Leu	Glu
			85					90					95		
Thr	Glu	Lys	Cys	Leu	His	Val	Val	Thr	Glu	Ala	Val	Thr	Pro	Leu	Gly
			100					105					110		
Ile	Tyr	Leu	Lys	Ala	Arg	Val	Glu	Ala	Gly	Gly	Leu	Lys	Glu	Leu	Glu
		115					120					125			
Ile	Ser	Trp	Gly	Leu	His	Gln	Ile	Val	Lys	Ala	Leu	Ser	Phe	Leu	Val
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Asn	Asp	Cys	Ser	Leu	Ile	His	Asn	Asn	Val	Cys	Met	Ala	Ala	Val	Phe
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Val	Asp	Arg	Ala	Gly	Glu	Trp	Lys	Leu	Gly	Gly	Leu	Asp	Tyr	Met	Tyr
			165						170					175	
Ser	Ala	Gln	Gly	Asn	Gly	Gly	Gly	Pro	Pro	Arg	Lys	Gly	Ile	Pro	Glu
		180						185					190		
Leu	Glu	Gln	Tyr	Asp	Pro	Pro	Glu	Leu	Ala	Asp	Ser	Ser	Gly	Arg	Val
		195					200					205			
Val	Arg	Glu	Lys	Trp	Ser	Ala	Asp	Met	Trp	Arg	Leu	Gly	Cys	Leu	Ile
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Trp	Glu	Val	Phe	Asn	Gly	Pro	Leu	Pro	Arg	Ala	Ala	Ala	Leu	Arg	Asn

5421

660	665	670
Ala Gln Gln Asp Asp Trp Ser Thr Gly Gly Gln Val Ser Arg Ala Ser		
675	680	685
Gln Val Ser Asn Ser Asp His Lys Ser Ser Lys Ser Pro Glu Ser Asp		
690	695	700
Trp Ser Ser Trp Glu Ala Glu Gly Ser Trp Glu Gln Gly Trp Gln Glu		
705	710	715
Pro Ser Ser Gln Glu Pro Pro Pro Asp Gly Thr Arg Leu Ala Ser Glu		
725	730	735
Tyr Asn Trp Gly Gly Pro Glu Ser Ser Asp Lys Gly Asp Pro Phe Ala		
740	745	750
Thr Leu Ser Ala Arg Pro Ser Thr Gln Pro Arg Pro Asp Ser Trp Gly		
755	760	765
Glu Asp Asn Trp Glu Gly Leu Glu Thr Asp Ser Arg Gln Val Lys Ala		
770	775	780
Glu Leu Ala Arg Lys Lys Arg Glu Glu Arg Arg Glu Met Glu Ala		
785	790	795
Lys Arg Ala Glu Arg Lys Val Ala Lys Gly Pro Met Lys Leu Gly Ala		
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Arg Lys Leu Asp		
820		

<210> 6237

<211> 494

<212> DNA

<213> Homo sapiens

<400> 6237

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 180
 atggaatgag tagcaagagt cgaaagagaa tcatgcccga cctgtgacg gagccccctg
 240
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 360
 acggagacag gtaccactg tatgtcattc caaaacaaa gcgaccagaa attgactgca
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<210> 6238

<211> 141

<212> PRT

<213> Homo sapiens

<400> 6238

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20	25	30	
Ser Thr Pro Lys Asn Gly Met Ser Ser Lys Ser Arg Lys Arg Ile Met			
35	40	45	
Pro Asp Pro Val Thr Glu Pro Pro Val Thr Asp Pro Val Tyr Glu Ala			
50	55	60	
Leu Leu Tyr Cys Asn Ile Pro Ser Val Ala Glu Arg Ser Met Glu Gly			
65	70	75	80
His Ala Pro His His Phe Lys Leu Val Ser Val His Val Phe Ile Arg			
85	90	95	
His Gly Asp Arg Tyr Pro Leu Tyr Val Ile Pro Lys Thr Lys Arg Pro			
100	105	110	
Glu Ile Asp Cys Thr Leu Val Ala Asn Arg Lys Pro Tyr His Pro Lys			
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Leu Glu Ala Phe Ile Ser His Met Leu Arg Gly Ser Gly			
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<210> 6239

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6239

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900

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aaaaaaaaa a

911

<210> 6240

<211> 235

<212> PRT

<213> Homo sapiens

<400> 6240

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          20          25          30
Leu Glu Leu Leu Ser Pro Phe Gln Leu Tyr Phe Asn Pro His Leu Val
          35          40          45
Phe Arg Lys Phe Gln Val Trp Arg Leu Val Thr Asn Phe Leu Phe Phe
          50          55          60
Gly Pro Leu Gly Phe Ser Phe Phe Phe Asn Met Leu Phe Val Phe Arg
          65          70          75          80
Tyr Cys Arg Met Leu Glu Glu Gly Ser Phe Arg Gly Arg Thr Ala Asp
          85          90          95
Phe Val Phe Met Phe Leu Phe Gly Gly Val Leu Met Thr Leu Leu Gly
          100          105          110
Leu Leu Gly Ser Leu Phe Phe Leu Gly Gln Ala Leu Met Ala Met Leu
          115          120          125
Val Tyr Val Trp Ser Arg Arg Ser Pro Arg Val Arg Val Asn Phe Phe
          130          135          140
Gly Leu Leu Thr Phe Gln Ala Pro Phe Leu Pro Trp Ala Leu Met Gly
          145          150          155          160
Phe Ser Leu Leu Leu Gly Asn Ser Ile Leu Val Asp Leu Leu Gly Ile
          165          170          175
Ala Val Gly His Ile Tyr Tyr Phe Leu Glu Asp Val Phe Pro Asn Gln
          180          185          190
Pro Gly Gly Lys Arg Leu Leu Gln Thr Pro Gly Phe Leu Lys Leu Leu
          195          200          205
Leu Asp Ala Pro Ala Glu Asp Pro Asn Tyr Leu Pro Leu Pro Glu Glu
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Gln Pro Gly Pro His Leu Pro Pro Pro Gln Gln
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<210> 6241

<211> 1515

<212> DNA

<213> Homo sapiens

<400> 6241

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240

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<210> 6242

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6242

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<213> Homo sapiens
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<400> 6244

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 20 25 30
 Gly Phe Leu Leu Trp Lys Ala Ile Pro Ser Phe Ala Ser Ser Thr Leu
 35 40 45
 Arg Met Ser Ser Ser Leu His Ser Leu Trp Phe Val Pro Leu Val Ser
 50 55 60
 Glu Glu Glu Val Leu Ile Ile Leu Ser Gly Ser Glu Cys Ser Thr Cys
 65 70 75 80
 Pro Tyr Val Leu Ser Tyr Pro Thr Ser Ser Leu Thr Leu Phe His Gln
 85 90 95
 Phe Leu Ser Phe Ser Pro Trp Arg
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<210> 6245

<211> 6609

<212> DNA

<213> Homo sapiens

<400> 6245

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5820

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 6609

<210> 6246

<211> 1286

<212> PRT

<213> Homo sapiens

<400> 6246

Val	Leu	Asp	Asn	Gln	Ile	Lys	Lys	Asp	Leu	Ala	Asp	Lys	Glu	Thr	Leu
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		20					25				30				
Ile	Leu	Ser	Glu	Gln	Lys	Ala	Met	Ile	Asn	Ala	Met	Asp	Ser	Lys	Ile
	35					40					45				
Arg	Ser	Leu	Glu	Gln	Arg	Ile	Val	Glu	Leu	Ser	Glu	Ala	Asn	Lys	Leu
	50				55					60					
Ala	Ala	Asn	Ser	Ser	Leu	Phe	Thr	Gln	Arg	Asn	Met	Lys	Ala	Gln	Glu
65				70					75					80	
Glu	Met	Ile	Ser	Glu	Leu	Arg	Gln	Gln	Lys	Phe	Tyr	Leu	Glu	Thr	Gln
		85					90					95			
Ala	Gly	Lys	Leu	Glu	Ala	Gln	Asn	Arg	Lys	Leu	Glu	Glu	Gln	Leu	Glu
	100						105				110				
Lys	Ile	Ser	His	Gln	Asp	His	Ser	Asp	Lys	Asn	Arg	Leu	Leu	Glu	Leu
	115					120					125				
Glu	Thr	Arg	Leu	Arg	Glu	Val	Ser	Leu	Glu	His	Glu	Glu	Gln	Lys	Leu
	130					135					140				
Glu	Leu	Lys	Arg	Gln	Leu	Thr	Glu	Leu	Gln	Leu	Ser	Leu	Gln	Glu	Arg

145 150 155 160
 Glu Ser Gln Leu Thr Ala Leu Gln Ala Ala Arg Ala Ala Leu Glu Ser
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 Gln Leu Arg Gln Ala Lys Thr Glu Leu Glu Glu Thr Thr Ala Glu Ala
 180 185 190
 Glu Glu Glu Ile Gln Ala Leu Thr Ala His Arg Asp Glu Ile Gln Arg
 195 200 205
 Lys Phe Asp Ala Leu Arg Asn Ser Cys Thr Val Ile Thr Asp Leu Glu
 210 215 220
 Glu Gln Leu Asn Gln Leu Thr Glu Asp Asn Ala Glu Leu Asn Asn Gln
 225 230 235 240
 Asn Phe Tyr Leu Ser Lys Gln Leu Asp Glu Ala Ser Gly Ala Asn Asp
 245 250 255
 Glu Ile Val Gln Leu Arg Ser Glu Val Asp His Leu Arg Arg Glu Ile
 260 265 270
 Thr Glu Arg Glu Met Gln Leu Thr Ser Gln Lys Gln Thr Met Glu Ala
 275 280 285
 Leu Lys Thr Thr Cys Thr Met Leu Glu Glu Gln Val Met Asp Leu Glu
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 Ala Leu Asn Asp Glu Leu Leu Glu Lys Glu Arg Gln Trp Glu Ala Trp
 305 310 315 320
 Arg Ser Val Leu Gly Asp Glu Lys Ser Gln Phe Glu Cys Arg Val Arg
 325 330 335
 Glu Leu Gln Arg Met Leu Asp Thr Glu Lys Gln Ser Arg Ala Arg Ala
 340 345 350
 Asp Gln Arg Ile Thr Glu Ser Arg Gln Val Val Glu Leu Ala Val Lys
 355 360 365
 Glu His Lys Ala Glu Ile Leu Ala Leu Gln Gln Ala Leu Lys Glu Gln
 370 375 380
 Lys Leu Lys Ala Glu Ser Leu Ser Asp Lys Leu Asn Asp Leu Glu Lys
 385 390 395 400
 Lys His Ala Met Leu Glu Met Asn Ala Arg Ser Leu Gln Gln Lys Leu
 405 410 415
 Glu Thr Glu Arg Glu Leu Lys Gln Arg Leu Leu Glu Glu Gln Ala Lys
 420 425 430
 Leu Gln Gln Gln Met Asp Leu Gln Lys Asn His Ile Phe Arg Leu Thr
 435 440 445
 Gln Gly Leu Gln Glu Ala Leu Asp Arg Ala Asp Leu Leu Lys Thr Glu
 450 455 460
 Arg Ser Asp Leu Glu Tyr Gln Leu Glu Asn Ile Gln Val Leu Tyr Ser
 465 470 475 480
 His Glu Lys Val Lys Met Glu Gly Thr Ile Ser Gln Gln Thr Lys Leu
 485 490 495
 Ile Asp Phe Leu Gln Ala Lys Met Asp Gln Pro Ala Lys Lys Lys
 500 505 510
 Val Pro Leu Gln Tyr Asn Glu Leu Lys Leu Ala Leu Glu Lys Glu Lys
 515 520 525
 Ala Arg Cys Ala Glu Leu Glu Glu Ala Leu Gln Lys Thr Arg Ile Glu
 530 535 540
 Leu Arg Ser Ala Arg Glu Glu Ala Ala His Arg Lys Ala Thr Asp His
 545 550 555 560
 Pro His Pro Ser Thr Pro Ala Thr Ala Arg Gln Gln Ile Ala Met Ser
 565 570 575
 Ala Ile Val Arg Ser Pro Glu His Gln Pro Ser Ala Met Ser Leu Leu

	580		585		590	
Ala Pro Pro Ser Ser Arg Arg Lys Glu Ser Ser Thr Pro Glu Glu Phe						
595			600		605	
Ser Arg Arg Leu Lys Glu Arg Met His His Asn Ile Pro His Arg Phe						
610			615		620	
Asn Val Gly Leu Asn Met Arg Ala Thr Lys Cys Ala Val Cys Leu Asp						
625			630		635	640
Thr Val His Phe Gly Arg Gln Ala Ser Lys Cys Leu Glu Cys Gln Val						
645			650		655	
Met Cys His Pro Lys Cys Ser Thr Cys Leu Pro Ala Thr Cys Gly Leu						
660			665		670	
Pro Ala Glu Tyr Ala Thr His Phe Thr Glu Ala Phe Cys Arg Asp Lys						
675			680		685	
Met Asn Ser Pro Gly Leu Gln Thr Lys Glu Pro Ser Ser Ser Leu His						
690			695		700	
Leu Glu Gly Trp Met Lys Val Pro Arg Asn Asn Lys Arg Gly Gln Gln						
705			710		715	720
Gly Trp Asp Arg Lys Tyr Ile Val Leu Glu Gly Ser Lys Val Leu Ile						
725			730		735	
Tyr Asp Asn Glu Ala Arg Glu Ala Gly Gln Arg Pro Val Glu Glu Phe						
740			745		750	
Glu Leu Cys Leu Pro Asp Gly Asp Val Ser Ile His Gly Ala Val Gly						
755			760		765	
Ala Ser Glu Leu Ala Asn Thr Ala Lys Ala Asp Val Pro Tyr Ile Leu						
770			775		780	
Lys Met Glu Ser His Pro His Thr Thr Cys Trp Pro Gly Arg Thr Leu						
785			790		795	800
Tyr Leu Leu Ala Pro Ser Phe Pro Asp Lys Gln Arg Trp Val Thr Ala						
805			810		815	
Leu Glu Ser Val Ala Gly Gly Arg Val Ser Arg Glu Lys Ala Glu						
820			825		830	
Ala Asp Ala Lys Leu Leu Gly Asn Ser Leu Leu Lys Leu Glu Gly Asp						
835			840		845	
Asp Arg Leu Asp Met Asn Cys Thr Leu Pro Phe Ser Asp Gln Val Val						
850			855		860	
Leu Val Gly Thr Glu Glu Gly Leu Tyr Ala Leu Asn Val Leu Lys Asn						
865			870		875	880
Ser Leu Thr His Val Pro Gly Ile Gly Ala Val Phe Gln Ile Tyr Ile						
885			890		895	
Ile Lys Asp Leu Glu Lys Leu Leu Met Ile Ala Gly Glu Glu Arg Ala						
900			905		910	
Leu Cys Leu Val Asp Val Lys Lys Val Lys Gln Ser Leu Ala Gln Ser						
915			920		925	
His Leu Pro Ala Gln Pro Asp Ile Ser Pro Asn Ile Phe Glu Ala Val						
930			935		940	
Lys Gly Cys His Leu Phe Gly Ala Gly Lys Ile Glu Asn Gly Leu Cys						
945			950		955	960
Ile Cys Ala Ala Met Pro Ser Lys Val Val Ile Leu Arg Tyr Asn Glu						
965			970		975	
Asn Leu Ser Lys Tyr Cys Ile Arg Lys Glu Ile Glu Thr Ser Glu Pro						
980			985		990	
Cys Ser Cys Ile His Phe Thr Asn Tyr Ser Ile Leu Ile Gly Thr Asn						
995			1000		1005	
Lys Phe Tyr Glu Ile Asp Met Lys Gln Tyr Thr Leu Glu Glu Phe Leu						

1010 1015 1020
 Asp Lys Asn Asp His Ser Leu Ala Pro Ala Val Phe Ala Ala Ser Ser
 1025 1030 1035 1040
 Asn Ser Phe Pro Val Ser Ile Val Gln Val Asn Ser Ala Gly Gln Arg
 1045 1050 1055
 Glu Glu Tyr Leu Leu Cys Phe His Glu Phe Gly Val Phe Val Asp Ser
 1060 1065 1070
 Tyr Gly Arg Arg Ser Arg Thr Asp Asp Leu Lys Trp Ser Arg Leu Pro
 1075 1080 1085
 Leu Ala Phe Ala Tyr Arg Glu Pro Tyr Leu Phe Val Thr His Phe Asn
 1090 1095 1100
 Ser Leu Glu Val Ile Glu Ile Gln Ala Arg Ser Ser Ala Gly Thr Pro
 1105 1110 1115 1120
 Ala Arg Ala Tyr Leu Asp Ile Pro Asn Pro Arg Tyr Leu Gly Pro Ala
 1125 1130 1135
 Ile Ser Ser Gly Ala Ile Tyr Leu Ala Ser Ser Tyr Gln Asp Lys Leu
 1140 1145 1150
 Arg Val Ile Cys Cys Lys Gly Asn Leu Val Lys Glu Ser Gly Thr Glu
 1155 1160 1165
 His His Arg Gly Pro Ser Thr Ser Arg Ser Ser Pro Asn Lys Arg Gly
 1170 1175 1180
 Pro Pro Thr Tyr Asn Glu His Ile Thr Lys Arg Val Ala Ser Ser Pro
 1185 1190 1195 1200
 Ala Pro Pro Glu Gly Pro Ser His Pro Arg Glu Pro Ser Thr Pro His
 1205 1210 1215
 Arg Tyr Arg Glu Gly Arg Thr Glu Leu Arg Arg Asp Lys Ser Pro Gly
 1220 1225 1230
 Arg Pro Leu Glu Arg Glu Lys Ser Pro Gly Arg Met Leu Ser Thr Arg
 1235 1240 1245
 Arg Glu Arg Ser Pro Gly Arg Leu Phe Glu Asp Ser Ser Arg Gly Arg
 1250 1255 1260
 Leu Pro Ala Gly Ala Val Arg Thr Pro Leu Ser Gln Val Asn Lys Val
 1265 1270 1275 1280
 Trp Asp Gln Ser Ser Val
 1285

<210> 6247

<211> 497

<212> DNA

<213> Homo sapiens

<400> 6247

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 120
 aaggctgcat gggggctcctt gcccgaggag cgccccacct agagaaacag ccggcagccg
 180
 gccgcagcg cgttctcccg ggagagaaat attattcatc tgtgccagag gaaggagggg
 240
 caacccatgt ctatcggttat cacagagggc agtcgaagct gcacatgtgc ttggacatag
 300
 ggaatggtca gagaaaagac agaaaaaaga catcccttgg tctggaggc agctatcaaa
 360

tatcagagca tgctccagag gcatcccagc ctgtgagtag ggaactgctt acgcactggg
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 480
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 497

<210> 6248
 <211> 142
 <212> PRT
 <213> Homo sapiens

<400> 6248
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 20 25 30
 Ala Ser Gln Arg Leu His Gly Gly Pro Cys Pro Gly Gly Ala Pro Pro
 35 40 45
 Arg Glu Thr Ala Gly Ser Arg Pro Ala Ala Arg Ser Pro Gly Arg Glu
 50 55 60
 Ile Leu Phe Ile Cys Ala Arg Gly Arg Arg Gly Asn Pro Cys Leu Ser
 65 70 75 80
 Leu Ser Gln Arg Arg Val Glu Ala Ala His Val Leu Gly His Arg Glu
 85 90 95
 Trp Ser Glu Lys Arg Gln Lys Lys Asp Ile Pro Trp Ser Trp Arg Gln
 100 105 110
 Leu Ser Asn Ile Arg Ala Cys Ser Arg Gly Ile Pro Ala Cys Glu Tyr
 115 120 125
 Gly Thr Ala Tyr Ala Leu Gly Phe Thr Thr Val Ala Thr Pro
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<210> 6249
 <211> 1217
 <212> DNA
 <213> Homo sapiens

<400> 6249
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 120
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 180
 ggttcatta tgggtcgact tgatgggaaa gtcacatcc tgacggccgc tgctcagggg
 240
 attggccaag cagctgcctt agcttttgca agagaagggt ccaaagtcac agccacagac
 300
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 420
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 480

tgggacttct cgatgaatct caatgtgcgc agcatgtacc tgatgatcaa ggcattcctt
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 720
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 780
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 1020
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 1080
 ttctttaagt atattaatct ctttgaatac tcttctgaaa tcattgtaaa gaaataaaaa
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 1217

<210> 6250

<211> 245

<212> PRT

<213> Homo sapiens

<400> 6250

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 20 25 30
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 35 40 45
 Tyr Pro Gly Ile Gln Thr Arg Val Leu Asp Val Thr Lys Lys Lys Gln
 50 55 60
 Ile Asp Gln Phe Ala Asn Glu Val Glu Arg Leu Asp Val Leu Phe Asn
 65 70 75 80
 Val Ala Gly Phe Val His His Gly Thr Val Leu Asp Cys Glu Glu Lys
 85 90 95
 Asp Trp Asp Phe Ser Met Asn Leu Asn Val Arg Ser Met Tyr Leu Met
 100 105 110
 Ile Lys Ala Phe Leu Pro Lys Met Leu Ala Gln Lys Ser Gly Asn Ile
 115 120 125
 Ile Asn Met Ser Ser Val Ala Ser Ser Val Lys Gly Val Val Asn Arg
 130 135 140
 Cys Val Tyr Ser Thr Thr Lys Ala Ala Val Ile Gly Leu Thr Lys Ser
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<210> 6251
<211> 1611
<212> DNA
<213> Homo sapiens
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 1200
 accatcccc aaacacaaga gtaggctagg ggagcgtgca ggcagcccc gctcagggc
 1260
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 1320
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 1380
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 1440
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 1500
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<210> 6252

<211> 100

<212> PRT

<213> Homo sapiens

<400> 6252

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Ala	Lys	Ser	Ser	Lys	Gly	Lys	Gly	Arg	Gly	His	Ser	Gly	Glu	Asn	Ser
		20					25					30			
Ile	Ser	Gly	Lys	Thr	Gly	Ile	His	Phe	Lys	Ile	Ser	Ala	Gln	Lys	Gly
		35				40					45				
Ser	Arg	Ala	Val	Leu	Lys	Pro	Gly	Arg	Gln	Gly	Pro	Pro	Ile	Pro	Thr
	50				55				60						
Ile	Leu	Leu	Ser	Pro	Ser	Pro	Pro	Trp	Arg	Thr	Leu	Ala	Arg	Val	Tyr
65				70				75					80		
Arg	Glu	Ser	His	His	Ile	Tyr	Tyr	Glu	Ala	Arg	Ala	Leu	Gly	Tyr	Val
			85					90					95		
Pro	Thr	Ile	Pro												
			100												

<210> 6253

<211> 1953

<212> DNA

<213> Homo sapiens

<400> 6253

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 180
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 240

aatatccctg aaggatctca tcagtatgaa ctcttaaaac atgcagaagc aactctagga
300
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360
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420
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480
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720
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960
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ccttaaggac acagccaaat cttaagtact gtgtgaccac tcttgttgtt atcacatag
1080
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cacaatggac attaagaatt tccatcaata atttatgaat aagtttccag aacaaatttc
1260
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1320
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1380
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1440
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1800
tatgttttta ttgtctcttg agccttagtt aagagtagtg tagaaatgca tgaacttcatt
1860

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 1920
 aaaaaaaaaa aaaaaaaaaa aaaaaaaaaa aaa
 1953

<210> 6254

<211> 216

<212> PRT

<213> Homo sapiens

<400> 6254

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			20					25					30		
Glu	Ala	Thr	Leu	Gly	Ser	Gly	Asn	Leu	Arg	Gln	Ala	Val	Met	Leu	Pro
			35				40					45			
Glu	Gly	Glu	Asp	Leu	Asn	Glu	Trp	Ile	Ala	Val	Asn	Thr	Val	Asp	Phe
	50					55				60					
Phe	Asn	Gln	Ile	Asn	Met	Leu	Tyr	Gly	Thr	Ile	Thr	Glu	Phe	Cys	Thr
65				70					75					80	
Glu	Ala	Ser	Cys	Pro	Val	Met	Ser	Ala	Gly	Pro	Arg	Tyr	Glu	Tyr	His
			85						90					95	
Trp	Ala	Asp	Gly	Thr	Asn	Ile	Lys	Lys	Pro	Ile	Lys	Cys	Ser	Ala	Pro
			100					105					110		
Lys	Tyr	Ile	Asp	Tyr	Leu	Met	Thr	Trp	Val	Gln	Asp	Gln	Leu	Asp	Asp
			115				120					125			
Glu	Thr	Leu	Phe	Pro	Ser	Lys	Ile	Gly	Val	Pro	Phe	Pro	Lys	Asn	Phe
	130					135					140				
Met	Ser	Val	Ala	Lys	Thr	Ile	Leu	Lys	Arg	Leu	Phe	Arg	Val	Tyr	Ala
145					150					155				160	
His	Ile	Tyr	His	Gln	His	Phe	Asp	Ser	Val	Met	Gln	Leu	Gln	Glu	Glu
			165						170					175	
Ala	His	Leu	Asn	Thr	Ser	Phe	Lys	His	Phe	Ile	Phe	Phe	Val	Gln	Glu
			180					185					190		
Phe	Asn	Leu	Ile	Asp	Arg	Arg	Glu	Leu	Ala	Pro	Leu	Gln	Glu	Leu	Ile
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Glu	Lys	Leu	Gly	Ser	Lys	Asp	Arg								
	210					215									

<210> 6255

<211> 622

<212> DNA

<213> Homo sapiens

<400> 6255

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 120
 aaagccacag tggtgcctt cacagccagc gagggccacg cacatcccag ggtagtggag
 180
 ctaccaaga cggatgaggg cctaggcttc aacatcatgg gtggcaaaga gcaaaactcg
 240

cccatctaca tctcccgggt catcccaggg ggtgtggctg accgccatgg aggcctcaag
 300
 cgtggggatc aactgttgct ggtgaacggt gtgagcgctg aggggtgagca gcatgagaag
 360
 gcgggtggagc tgtgaaggc ggcccagggc tgggtgaagc tggttgtccg ttacacaccg
 420
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 480
 cagcatcaga gctactcgtc cttggagtct cgagggttgaa accacagatc tggacgttca
 540
 cgtgcactct cttcctgtac agtatttatt gttcctggca ctttatttaa agatttttga
 600
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<210> 6256

<211> 150

<212> PRT

<213> Homo sapiens

<400> 6256

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Val	Ile	Pro	Gly	Gly	Val	Ala	Asp	Arg	His	Gly	Gly	Leu	Lys	Arg	Gly
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Glu	Lys	Ala	Val	Glu	Leu	Leu	Lys	Ala	Ala	Gln	Gly	Ser	Val	Lys	Leu
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Val	Val	Arg	Tyr	Thr	Pro	Arg	Val	Leu	Glu	Glu	Met	Glu	Ala	Arg	Phe
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Glu	Lys	Met	Arg	Ser	Ala	Arg	Arg	Gln	Gln	His	Gln	Ser	Tyr	Ser	
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<211> 2216

<212> DNA

<213> Homo sapiens

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<212> PRT

<213> Homo sapiens

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290	295	300
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<211> 384

<212> DNA

<213> Homo sapiens

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<212> DNA

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2160

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<210> 6264

<211> 654

<212> PRT

<213> Homo sapiens

<400> 6264

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		20					25					30			
Asn	Asn	Trp	Asp	Leu	Val	Ala	Ala	Ile	Asn	Gly	Val	Ile	Pro	Gln	Glu
		35				40					45				
Asn	Gly	Ile	Leu	Gln	Ser	Glu	Tyr	Gly	Gly	Glu	Thr	Ile	Pro	Gly	Pro
	50				55					60					
Ala	Phe	Asn	Pro	Ala	Ser	His	Pro	Ala	Ser	Ala	Pro	Thr	Ser	Ser	Ser
65				70					75					80	
Ser	Ser	Ala	Phe	Arg	Pro	Val	Met	Pro	Ser	Arg	Gln	Ile	Val	Glu	Arg
			85				90						95		
Gln	Pro	Arg	Met	Leu	Asp	Phe	Arg	Val	Glu	Tyr	Arg	Asp	Arg	Asn	Val
		100					105					110			
Asp	Val	Val	Leu	Glu	Asp	Thr	Cys	Thr	Val	Gly	Glu	Ile	Lys	Gln	Ile
	115					120					125				
Leu	Glu	Asn	Glu	Leu	Gln	Ile	Pro	Val	Ser	Lys	Met	Leu	Leu	Lys	Gly
	130				135				140						
Trp	Lys	Thr	Gly	Asp	Val	Glu	Asp	Ser	Thr	Val	Leu	Lys	Ser	Leu	His
145				150					155					160	
Leu	Pro	Lys	Asn	Asn	Ser	Leu	Tyr	Val	Leu	Thr	Pro	Asp	Leu	Pro	Pro
			165				170						175		
Pro	Ser	Ser	Ser	Ser	His	Ala	Gly	Ala	Leu	Gln	Glu	Ser	Leu	Asn	Gln
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Asn	Phe	Met	Leu	Ile	Ile	Thr	His	Arg	Glu	Val	Gln	Arg	Glu	Tyr	Asn
	195					200						205			
Leu	Asn	Phe	Ser	Gly	Ser	Ser	Thr	Ile	Gln	Glu	Val	Lys	Arg	Asn	Val
	210				215				220						
Tyr	Asp	Leu	Thr	Ser	Ile	Pro	Val	Arg	His	Gln	Leu	Trp	Glu	Gly	Trp
225				230					235					240	
Pro	Thr	Ser	Ala	Thr	Asp	Asp	Ser	Met	Cys	Leu	Ala	Glu	Ser	Gly	Leu
			245				250						255		
Ser	Tyr	Pro	Cys	His	Arg	Leu	Thr	Val	Gly	Arg	Arg	Ser	Ser	Pro	Ala
		260				265						270			
Gln	Thr	Arg	Glu	Gln	Ser	Glu	Glu	Gln	Ile	Thr	Asp	Val	His	Met	Val

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Ser Asp Ser Asp Gly Asp Asp Phe Glu Asp Ala Thr Glu Phe Gly Val		
290	295	300
Asp Asp Gly Glu Val Phe Gly Met Ala Ser Ser Ala Leu Arg Lys Ser		
305	310	315
Pro Met Ile Cys Phe Leu Val Pro Glu Asn Ala Glu Asn Glu Gly Asp		
325	330	335
Ala Leu Leu Gln Phe Thr Ala Glu Phe Ser Ser Arg Tyr Gly Asp Cys		
340	345	350
His Pro Val Phe Phe Ile Gly Ser Leu Glu Ala Ala Phe Gln Glu Ala		
355	360	365
Phe Tyr Val Lys Ala Arg Asp Arg Lys Leu Leu Ala Ile Tyr Leu His		
370	375	380
His Asp Glu Ser Val Leu Thr Asn Val Phe Cys Ser Gln Met Leu Cys		
385	390	395
Ala Glu Ser Ile Val Ser Tyr Leu Ser Gln Asn Phe Ile Thr Trp Ala		
405	410	415
Trp Asp Leu Thr Lys Asp Ser Asn Arg Ala Arg Phe Leu Thr Met Cys		
420	425	430
Asn Arg His Phe Gly Ser Val Val Ala Gln Thr Ile Arg Thr Gln Lys		
435	440	445
Thr Asp Gln Phe Pro Leu Phe Leu Ile Ile Met Gly Lys Arg Ser Ser		
450	455	460
Asn Glu Val Leu Asn Val Ile Gln Gly Asn Thr Thr Val Asp Glu Leu		
465	470	475
Met Met Arg Leu Met Ala Ala Met Glu Ile Phe Thr Ala Gln Gln Gln		
485	490	495
Glu Asp Ile Lys Asp Glu Asp Glu Arg Glu Ala Arg Glu Asn Val Lys		
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Arg Glu Gln Asp Glu Ala Tyr Arg Leu Ser Leu Glu Ala Asp Arg Ala		
515	520	525
Lys Arg Glu Ala His Glu Arg Glu Met Ala Glu Gln Phe Arg Leu Glu		
530	535	540
Gln Ile Arg Lys Glu Gln Glu Glu Arg Glu Ala Ile Arg Leu Ser		
545	550	555
Leu Glu Gln Ala Leu Pro Pro Glu Pro Lys Glu Glu Asn Ala Glu Pro		
565	570	575
Val Ser Lys Leu Arg Ile Arg Thr Pro Ser Gly Glu Phe Leu Glu Arg		
580	585	590
Arg Phe Leu Ala Ser Asn Lys Leu Gln Ile Val Phe Asp Phe Val Ala		
595	600	605
Ser Lys Gly Phe Pro Trp Asp Glu Tyr Lys Leu Leu Ser Thr Phe Pro		
610	615	620
Arg Arg Asp Val Thr Gln Leu Asp Pro Asn Lys Ser Leu Leu Glu Val		
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Lys Leu Phe Pro Gln Glu Thr Leu Phe Leu Glu Ala Lys Glu		
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<210> 6265

<211> 1344

<212> DNA

<213> Homo sapiens

<400> 6265

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180
ggaatcttca acagatacaa tattctcaag attcagaagg tttgtaacaa gaaactatgg
240
gaaagataca ctcaccggag aaaagaagtt tctgaagaaa accacaacca tgccaatgaa
300
cgaatgctat ttcattgggtc tctttttgtg aatgcaatta tccacaaagg ctttgatgaa
360
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420
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480
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540
ttcctgcagt tcagtgaat gaaaatggca cattctctc caggtcacat ctcagtcact
600
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660
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720
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780
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<210> 6266

<211> 240

<212> PRT

<213> Homo sapiens

<400> 6266

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	20	25	30
Ser Pro Asp	Asp Lys Glu Phe Gln Ser Val Glu Glu Glu Met Gln Ser		
	35	40	45
Thr Val Arg	Glu His Arg Asp Gly Gly His Ala Gly Gly Ile Phe Asn		
	50	55	60
Arg Tyr Asn	Ile Leu Lys Ile Gln Lys Val Cys Asn Lys Lys Leu Trp		
65	70	75	80
Glu Arg Tyr	Thr His Arg Arg Lys Glu Val Ser Glu Glu Asn His Asn		
	85	90	95
His Ala Asn	Glu Arg Met Leu Phe His Gly Ser Pro Phe Val Asn Ala		
	100	105	110
Ile Ile His	Lys Gly Phe Asp Glu Arg His Ala Tyr Ile Gly Gly Met		
	115	120	125
Phe Gly Ala	Gly Ile Tyr Phe Ala Glu Asn Ser Ser Lys Ser Asn Gln		
	130	135	140
Tyr Val Tyr	Gly Ile Gly Gly Gly Thr Gly Cys Pro Val His Lys Asp		
145	150	155	160
Arg Ser Cys	Tyr Ile Cys His Arg Gln Leu Leu Phe Cys Arg Val Thr		
	165	170	175
Leu Gly Lys	Ser Phe Leu Gln Phe Ser Ala Met Lys Met Ala His Ser		
	180	185	190
Pro Pro Gly	His His Ser Val Thr Gly Arg Pro Ser Val Asn Gly Leu		
	195	200	205
Ala Leu Ala	Glu Tyr Val Ile Tyr Arg Gly Glu Gln Ala Tyr Pro Glu		
	210	215	220
Tyr Leu Ile	Thr Tyr Gln Ile Met Arg Pro Glu Gly Met Val Asp Gly		
225	230	235	240

<210> 6267

<211> 328

<212> DNA

<213> Homo sapiens

<400> 6267

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120

gatgagcctt tctgcagtt ccgaaggaac gtgttcttcc caaagcggcg ggagctccag
180

atccatgacg aggaggtcct gcggctgctc tatgaggagg ccaagggcaa cgtgctggct
240

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328

<210> 6268

<211> 83

<212> PRT

<213> Homo sapiens

<400> 6268

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 20 25 30
 Leu Gln Ile His Asp Glu Glu Val Leu Arg Leu Leu Tyr Glu Glu Ala
 35 40 45
 Lys Gly Asn Val Leu Ala Ala Arg Tyr Pro Cys Asp Val Glu Asp Cys
 50 55 60
 Glu Ala Leu Gly Ala Leu Val Cys Arg Val Gln Leu Gly Pro Tyr Gln
 65 70 75 80
 Pro Gly Arg

<210> 6269

<211> 923

<212> DNA

<213> Homo sapiens

<400> 6269

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 120
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 480
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<210> 6270

<211> 307
 <212> PRT
 <213> Homo sapiens

<400> 6270

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          20          25          30
Glu Glu Leu Ile His Gln Leu Arg Asn Val Met Val Leu Gln Asp Glu
          35          40          45
Asn Phe Val Ser Lys Glu Glu Phe Gln Ala Val Glu Lys Lys Leu Val
          50          55          60
Glu Glu Lys Ala Ala His Ala Lys Thr Lys Val Leu Leu Ala Lys Glu
          65          70          75          80
Glu Glu Lys Leu Gln Phe Ala Leu Gly Glu Val Glu Val Leu Ser Lys
          85          90          95
Gln Leu Glu Lys Glu Lys Leu Ala Phe Glu Lys Ala Leu Ser Ser Val
          100         105         110
Lys Ser Lys Val Leu Gln Glu Ser Ser Lys Lys Asp Gln Leu Ile Thr
          115         120         125
Lys Cys Asn Glu Ile Glu Ser His Ile Ile Lys Gln Glu Asp Ile Leu
          130         135         140
Asn Gly Lys Glu Asn Glu Ile Lys Glu Leu Gln Gln Val Ile Ser Gln
          145         150         155         160
Gln Lys Gln Ile Phe Ser Pro Pro Pro Ala Gly Ser Val Ala Gly Ile
          165         170         175
Thr Cys Leu Thr Ser Gly Ser Arg Ser Ser Arg Lys Ala Thr Trp Pro
          180         185         190
Arg Cys Trp Thr Arg Ser Ile Arg Lys Pro Gln Gly His Val Arg Pro
          195         200         205
Ala Ala Thr Ser Ile Pro Gly Lys Asn Lys Met Ala Ala Ala Phe Leu
          210         215         220
Phe Ser Gly Cys Asn Pro Gln Pro Leu Pro Ser Leu Leu Trp Glu Ser
          225         230         235         240
Pro Ala Ser Ser Pro Cys Tyr Phe Pro Pro Ser Trp Ile Val Val Gly
          245         250         255
Val His Lys Val Gly Ala Cys Ser Leu Gly Glu Glu Leu Gly Leu Cys
          260         265         270
Cys Leu Val Gly Thr Thr Ala Ser Phe Gly Tyr Leu Ile Pro Ser Tyr
          275         280         285
Ile Asn Ser Pro Gly Tyr Pro Val Ile Phe His Pro Thr Pro Ser Val
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Leu Val Asn
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<210> 6271
 <211> 1437
 <212> DNA
 <213> Homo sapiens

<400> 6271

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720
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<210> 6272

<211> 296

<212> PRT

<213> Homo sapiens

<400> 6272

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Leu Glu Val Ile Lys Thr Arg Leu Gln Ser Ser Arg Leu Ala Leu Arg
35           40           45
Thr Val Tyr Tyr Pro Gln Val His Leu Gly Thr Ile Ser Gly Ala Gly
50           55           60
Met Val Arg Pro Thr Ser Val Thr Pro Gly Leu Phe Gln Val Leu Lys
65           70           75           80
Ala Val Tyr Phe Ala Cys Tyr Ser Lys Ala Lys Glu Gln Phe Asn Gly
85           90           95
Ile Phe Val Pro Asn Ser Asn Ile Val His Leu Phe Ser Ala Gly Ser
100          105          110
Ala Ala Phe Ile Thr Asn Ser Leu Met Asn Pro Ile Trp Met Val Lys
115          120          125
Thr Arg Met Gln Leu Glu Gln Lys Val Arg Gly Ser Lys Gln Met Asn
130          135          140
Thr Leu Gln Cys Ala Arg Tyr Val Tyr Gln Thr Glu Gly Ile Arg Gly
145          150          155          160
Phe Tyr Arg Gly Leu Thr Ala Ser Tyr Ala Gly Ile Ser Glu Thr Ile
165          170          175
Ile Cys Phe Ala Ile Tyr Glu Ser Leu Lys Lys Tyr Leu Lys Glu Ala
180          185          190
Pro Leu Ala Ser Ser Ala Asn Gly Thr Glu Lys Asn Ser Thr Ser Phe
195          200          205
Phe Gly Leu Met Ala Ala Ala Ala Leu Ser Lys Gly Cys Ala Ser Cys
210          215          220
Ile Ala Tyr Pro His Glu Val Ile Arg Thr Arg Leu Arg Glu Glu Gly
225          230          235          240
Thr Lys Tyr Lys Ser Phe Val Gln Thr Ala Arg Leu Val Phe Arg Glu
245          250          255
Glu Gly Tyr Leu Ala Phe Tyr Arg Gly Leu Phe Ala Gln Leu Ile Arg
260          265          270
Gln Ile Pro Asn Thr Ala Ile Val Leu Ser Thr Tyr Glu Leu Ile Val
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<210> 6273

<211> 2355

<212> DNA

<213> Homo sapiens

<400> 6273

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120

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180

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<210> 6274

<211> 70

<212> PRT

<213> Homo sapiens

<400> 6274

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Ala	Ala	Tyr	Leu	Gly	Met	Ala	Tyr	Val	Ala	Val	Gln	Val	Ser	Ser	Ala
		35				40					45				
Gln	Ala	Gln	His	Phe	Ser	Leu	Leu	Tyr	Lys	Thr	Val	Gln	Arg	Leu	Leu
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<210> 6275

<211> 1534

<212> DNA

<213> Homo sapiens

<400> 6275

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 420

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<210> 6276

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6276

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His	Ala	Glu	Glu	Met	Glu	Leu	Leu	Leu	Glu	Asn	Tyr	Tyr	Arg	Leu	Ala
		20						25					30		
Asp	Asp	Leu	Ser	Asn	Ala	Ala	Arg	Glu	Leu	Arg	Val	Leu	Ile	Asp	Asp
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Ser	Gln	Ser	Ile	Ile	Phe	Ile	Asn	Leu	Asp	Ser	His	Arg	Asn	Val	Met
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Ile	Arg	Leu	Asn	Leu	Gln	Leu	Thr	Met	Gly	Thr	Phe	Ser	Leu	Ser	Leu

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Phe	Gly	Leu	Met	Gly	Val	Ala	Phe	Gly	Met	Asn	Leu	Glu	Ser	Ser	Leu
			85						90					95	
Glu	Glu	Asp	His	Arg	Ile	Phe	Trp	Leu	Ile	Thr	Gly	Ile	Met	Phe	Met
			100						105					110	
Gly	Ser	Gly	Leu	Ile	Trp	Arg	Arg	Leu	Leu	Ser	Phe	Leu	Gly	Arg	Gln
		115					120					125			
Leu	Glu	Ala	Pro	Leu	Pro	Pro	Met	Met	Ala	Ser	Leu	Pro	Lys	Lys	Thr
		130					135					140			
Leu	Leu	Ala	Asp	Arg	Ser	Met	Glu	Leu	Lys	Asn	Ser	Leu	Arg	Leu	Asp
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<210> 6277

<211> 1206

<212> DNA

<213> Homo sapiens

<400> 6277

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<210> 6278

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6278

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Gly	Val	Lys	Leu	Met	Asp	Phe	Gln	Ala	His	Arg	Arg	Gly	Gly	Thr	Leu
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Asn	Arg	Lys	His	Ile	Ser	Pro	Ala	Phe	Gln	Pro	Pro	Leu	Pro	Pro	Thr
		35					40					45			
Asp	Gly	Ser	Thr	Val	Val	Pro	Ala	Gly	Pro	Glu	Pro	Pro	Pro	Gln	Ser
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Gln	Ser	Asp	Ser	Ile	Trp	Pro	Lys	Ser	Ala	Pro	Gly	Ser	Cys	Trp	Leu
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	210					215						220			
Pro	Ile	Gln	Ala	Pro	Asn	His	Pro	Pro	Pro	Gln	Pro	Pro	Thr	Gln	Ala
225					230					235					240
Thr	Pro	Leu	Met	His	Thr	Lys	Pro	Asn	Ser	Gln	Gly	Pro	Pro	Asn	Pro
			245						250					255	
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Pro	Gln	Thr	Pro	Thr	Pro	Pro	Ser	Thr	Pro	Pro	Leu	Gly	Lys	Gln	Asn
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Pro	Arg	Asn	Arg	Pro	Ser	Val	Pro	Pro	Pro	Gln	Pro	Pro	Gly	Val	
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His	Ser	Ala	Gly	Asp	Ser	Ser	Leu	Thr	Asn	Thr	Ala	Pro	Thr	Ala	Ser
		340		345		350									
Lys	Ile	Val	Thr	Asp	Ser	Asn	Ser	Arg	Val	Ser	Glu	Pro	His	Arg	Ser
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Ile	Phe	Pro	Glu	Met	His	Ser	Asp	Ser	Ala	Ser	Lys	Asp	Val	Pro	Gly
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<210> 6279

<211> 2795

<212> DNA

<213> Homo sapiens

<400> 6279

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<211> 619

<212> PRT

<213> Homo sapiens

<400> 6280

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Ser	Leu	Ser	Leu	Glu	Ile	Leu	Gln	Ile	Ile	Lys	Glu	Ser	Gln	Gln	Gln		
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Arg	Arg	Gln	Arg	Arg	Leu	Arg	Lys	Thr	Leu	Asn	Phe	Lys	Met	Gly	Asn		
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Arg	His	Lys	Phe	Thr	Gly	Lys	Lys	Val	Thr	Glu	Glu	Leu	Leu	Thr	Asp		
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Tyr	Ala	Met	Gln	Leu	Lys	Gln	Glu	Ala	Asn	Thr	Glu	Pro	Arg	Lys	Arg		
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		180					185					190					
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 Tyr Val Leu Val Lys Lys Trp Ser Glu Ala Leu Val Leu Tyr Asp Arg
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 565 570 575
 Pro Cys Lys Pro Leu Phe Phe Asp Leu Ala Leu Asn His Val Ala Phe
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<211> 741

<212> DNA

<213> Homo sapiens

<400> 6281

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<212> PRT

<213> Homo sapiens

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			20					25					30		
Glu	Lys	Lys	Gln	Met	Val	Ala	Asn	Val	Glu	Lys	Gln	Leu	Glu	Glu	Ala
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Lys	Glu	Leu	Leu	Glu	Gln	Met	Asp	Leu	Glu	Val	Arg	Glu	Ile	Pro	Pro
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Gln	Ser	Arg	Gly	Met	Tyr	Ser	Asn	Arg	Met	Arg	Ser	Tyr	Lys	Gln	Glu
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Met	Gly	Lys	Leu	Glu	Thr	Asp	Phe	Lys	Arg	Ser	Arg	Ile	Ala	Tyr	Ser
			85						90					95	
Asp	Glu	Val	Arg	Asn	Glu	Leu	Leu	Gly	Asp	Asp	Gly	Asn	Ser	Ser	Glu
			100					105					110		
Asn	Gln	Arg	Ala	His	Leu	Leu	Asp	Asn	Thr	Glu	Arg	Leu	Glu	Arg	Ser
		115					120					125			
Ser	Arg	Arg	Leu	Glu	Ala	Gly	Tyr	Gln	Ile	Ala	Val	Glu	Thr	Gly	Glu
	130					135					140				
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<210> 6283

<211> 2312

<212> DNA

<213> Homo sapiens

<400> 6283

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<210> 6284

<211> 122

<212> PRT

<213> Homo sapiens

<400> 6284

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			20					25					30		
Lys	Pro	Ile	His	Val	Phe	Phe	Gly	Ala	Ala	Ile	Leu	Ser	Leu	Ser	Ile
		35					40					45			
Ala	Ser	Val	Ile	Ser	Gly	Ile	Asn	Glu	Lys	Leu	Phe	Phe	Ser	Leu	Lys
	50					55				60					
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Asn	Ser	Thr	Gly	Met	Leu	Val	Val	Ala	Phe	Gly	Leu	Leu	Val	Leu	Tyr
			85					90					95		
Ile	Leu	Leu	Ala	Ser	Ser	Trp	Lys	Arg	Pro	Glu	Pro	Gly	Ile	Leu	Thr
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<210> 6285

<211> 2542

<212> DNA

<213> Homo sapiens

<400> 6285

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360
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<210> 6286

<211> 57

<212> PRT

<213> Homo sapiens

<400> 6286

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 Ala Gly Asn Ile Tyr Leu Gly Thr Ser Pro Pro Ser Gln Glu Pro Ser
 35 40 45
 Ser Pro Trp Ala Ser Trp His Arg Ser
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<210> 6287

<211> 1674

<212> DNA

<213> Homo sapiens

<400> 6287

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<210> 6288

<211> 269

<212> PRT

<213> Homo sapiens

<400> 6288

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 35 40 45
 Ser Val Lys Leu Asp Glu His Ile Ile Pro Leu Gly Ser Met Ala Ile
 50 55 60
 Asn Ser Ile Ser Lys Leu Thr Gln Leu Thr Gln Ser Ser Met Tyr Ser
 65 70 75 80
 Leu Pro Asn Ala Pro Thr Leu Ala Asp Leu Glu Asp Asp Thr His Glu
 85 90 95
 Ala Ser Asp Asp Gln Pro Glu Lys Pro His Phe Asp Ser Arg Ser Val
 100 105 110
 Ile Phe Glu Leu Asp Ser Cys Asn Gly Ser Gly Lys Val Cys Leu Val
 115 120 125
 Tyr Lys Ser Gly Lys Pro Ala Leu Ala Glu Asp Thr Glu Ile Trp Phe
 130 135 140
 Leu Asp Arg Ala Leu Tyr Trp His Phe Leu Thr Asp Thr Phe Thr Ala
 145 150 155 160
 Tyr Tyr Arg Leu Leu Ile Thr His Leu Gly Leu Pro Gln Trp Gln Tyr
 165 170 175
 Ala Phe Thr Ser Tyr Gly Ile Ser Pro Gln Ala Lys Gln Trp Phe Ser
 180 185 190
 Met Tyr Lys Pro Ile Thr Tyr Asn Thr Asn Leu Leu Thr Glu Glu Thr
 195 200 205
 Asp Ser Phe Val Asn Lys Leu Asp Pro Ser Lys Val Phe Lys Ser Lys
 210 215 220
 Asn Lys Ile Val Ile Pro Lys Lys Lys Gly Pro Val Gln Pro Ala Gly
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<210> 6289

<211> 1321

<212> DNA

<213> Homo sapiens

<400> 6289

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<210> 6290

<211> 172

<212> PRT

<213> Homo sapiens

<400> 6290

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			20					25					30		
Ser	Pro	Asp	Glu	Gly	Leu	Ile	Glu	Asp	Leu	Thr	Ile	Glu	Asp	Lys	Ala
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Gln	Arg	Ser	Lys	Gln	Ala	Leu	Gln	Glu	Leu	Thr	Gln	Asn	Gln	Val	Val

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Leu	Leu	Asp	Thr	Leu	Glu	Gln	Glu	Ile	Ser	Lys	Phe	Lys	Glu	Cys His
				85					90				95	
Ser	Met	Leu	Asp	Ile	Asn	Ala	Leu	Phe	Ala	Glu	Ala	Lys	His	Tyr His
			100					105					110	
Ala	Lys	Leu	Val	Asn	Ile	Arg	Lys	Glu	Met	Leu	Met	Leu	His	Glu Lys
		115					120					125		
Thr	Ser	Lys	Leu	Lys	Lys	Arg	Ala	Leu	Lys	Leu	Gln	Gln	Lys	Arg Gln
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Lys	Glu	Glu	Leu	Glu	Arg	Glu	Gln	Gln	Arg	Glu	Lys	Gly	Phe	Glu Arg
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<210> 6291

<211> 2718

<212> DNA

<213> Homo sapiens

<400> 6291

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<210> 6292

<211> 497

<212> PRT

<213> Homo sapiens

<400> 6292

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Pro	Arg	Pro	Ser	Ser	Leu	Ser	Asp	Lys	Thr	Gln	Leu	His	Ser	Arg	Trp
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Lys	Thr	Asp	Pro	Val	Arg	Leu	Thr	Gln	Leu	Tyr	Glu	Gln	Ala	Arg	Trp
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Phe	Ala	Ala	Leu	Gln	Tyr	His	Ile	Asn	Lys	Leu	Ser	Gln	Ser	Gly	Glu
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			195			200						205			
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Gly	Arg	Thr	Met	Ala	Asp	Ser	Ser	Tyr	Thr	Ser	Glu	Val	Gln	Ala	Ile
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<210> 6293
<211> 750
<212> DNA
<213> Homo sapiens
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<210> 6294
 <211> 250
 <212> PRT
 <213> Homo sapiens

<400> 6294
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 Arg Ser Arg Leu Lys Val Arg Phe Cys Thr Asn Glu Ser Gln Lys Ser
 50 55 60
 Arg Ala Glu Leu Val Gly Gln Leu Gln Arg Leu Gly Phe Asp Ile Ser
 65 70 75 80
 Glu Gln Glu Val Thr Ala Pro Ala Pro Ala Ala Cys Gln Ile Leu Lys
 85 90 95
 Glu Arg Gly Leu Arg Pro Tyr Leu Leu Ile His Asp Gly Val Arg Ser
 100 105 110
 Glu Phe Asp Gln Ile Asp Thr Ser Asn Pro Asn Cys Val Val Ile Ala
 115 120 125
 Asp Ala Gly Glu Ser Phe Ser Tyr Gln Asn Met Asn Asn Ala Phe Gln
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 Val Leu Met Glu Leu Glu Lys Pro Val Leu Ile Ser Leu Gly Lys Gly
 145 150 155 160
 Arg Tyr Tyr Lys Glu Thr Ser Gly Leu Met Leu Asp Val Gly Pro Tyr
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 Met Lys Ala Leu Glu Tyr Ala Cys Gly Ile Lys Ala Glu Val Val Gly
 180 185 190
 Lys Pro Ser Pro Glu Phe Phe Lys Ser Ala Leu Gln Ala Ile Gly Val
 195 200 205
 Glu Ala His Gln Ala Val Met Ile Gly Asp Asp Ile Val Gly Asp Val
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<210> 6295
 <211> 2091
 <212> DNA
 <213> Homo sapiens

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<210> 6296

<211> 399

<212> PRT

<213> Homo sapiens

<400> 6296

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			20				25					30			
Ala	Cys	Gly	Cys	Arg	Leu	Val	Leu	Gly	Gly	Arg	Asp	Asp	Val	Ser	Ala
		35					40					45			
Gly	Leu	Arg	Gly	Ser	His	Gly	Ala	Arg	Gly	Glu	Pro	Leu	Asp	Pro	Ala
	50					55					60				
Arg	Pro	Leu	Gln	Arg	Pro	Pro	Arg	Pro	Glu	Val	Pro	Arg	Ala	Phe	Arg
65					70					75				80	
Arg	Gln	Pro	Arg	Ala	Ala	Pro	Ser	Phe	Phe	Phe	Ser	Ser	Ser	Ile	Lys
			85					90						95	
Gly	Gly	Arg	Arg	Ser	Ile	Ser	Phe	Ser	Val	Gly	Ala	Ser	Ser	Val	Val
			100					105						110	
Gly	Ser	Gly	Gly	Ser	Ser	Asp	Lys	Gly	Lys	Leu	Ser	Leu	Gln	Asp	Val
		115					120						125		
Ala	Glu	Leu	Ile	Arg	Ala	Arg	Ala	Cys	Gln	Arg	Val	Val	Val	Met	Val
	130					135						140			
Gly	Ala	Gly	Ile	Ser	Thr	Pro	Ser	Gly	Ile	Pro	Asp	Phe	Arg	Ser	Pro
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Gly	Ser	Gly	Leu	Tyr	Ser	Asn	Leu	Gln	Gln	Tyr	Asp	Leu	Pro	Tyr	Pro
			165					170						175	
Glu	Ala	Ile	Phe	Glu	Leu	Pro	Phe	Phe	Phe	His	Asn	Pro	Lys	Pro	Phe
			180					185						190	
Phe	Thr	Leu	Ala	Lys	Glu	Leu	Tyr	Pro	Gly	Asn	Tyr	Lys	Pro	Asn	Val
		195						200					205		
Thr	His	Tyr	Phe	Leu	Arg	Leu	Leu	His	Asp	Lys	Gly	Leu	Leu	Leu	Arg
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Leu	Tyr	Thr	Gln	Asn	Ile	Asp	Gly	Leu	Glu	Arg	Val	Ser	Gly	Ile	Pro
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Ala	Ser	Lys	Leu	Val	Glu	Ala	His	Gly	Thr	Phe	Ala	Ser	Ala	Thr	Cys
			245					250						255	
Thr	Val	Cys	Gln	Arg	Pro	Phe	Pro	Gly	Glu	Asp	Ile	Arg	Ala	Asp	Val
			260					265					270		
Met	Ala	Asp	Arg	Val	Pro	Arg	Cys	Pro	Val	Cys	Thr	Gly	Val	Val	Lys
		275					280						285		
Pro	Asp	Ile	Val	Phe	Phe	Gly	Glu	Pro	Leu	Pro	Gln	Arg	Phe	Leu	Leu
	290					295					300				
His	Val	Val	Asp	Phe	Pro	Met	Ala	Asp	Leu	Leu	Leu	Ile	Leu	Gly	Thr

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 Ser Leu Glu Val Glu Pro Phe Ala Ser Leu Thr Glu Ala Val Arg Ser
 325 330 335
 Ser Val Pro Arg Leu Leu Ile Asn Arg Asp Leu Val Gly Pro Leu Ala
 340 345 350
 Trp His Pro Arg Ser Arg Asp Val Ala Gln Leu Gly Asp Val Val His
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<210> 6297

<211> 472

<212> DNA

<213> Homo sapiens

<400> 6297

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<210> 6298

<211> 146

<212> PRT

<213> Homo sapiens

<400> 6298

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 Pro Phe Gly Leu Glu Glu Pro Gln Trp Val Pro Asp Lys Glu Cys Arg
 35 40 45
 Arg Cys Met Gln Cys Asp Ala Lys Phe Asp Phe Leu Thr Arg Lys His
 50 55 60
 His Cys Arg Arg Cys Gly Lys Cys Phe Cys Asp Arg Cys Cys Ser Gln
 65 70 75 80
 Lys Val Pro Leu Arg Arg Met Cys Phe Val Asp Pro Val Arg Gln Cys
 85 90 95
 Ala Glu Cys Ala Leu Val Ser Leu Lys Glu Ala Glu Phe Tyr Asp Lys

	100		105		110										
Gln	Leu	Lys	Val	Leu	Leu	Ser	Gly	Lys	Asp	Gly	Cys	Pro	Ala	Gln	Ser
	115						120					125			
Cys	Ala	Leu	Arg	Gln	Pro	Ala	Pro	Arg	Val	Cys	Gly	Asp	Ala	Val	Gly
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Cys	Ala														
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<210> 6299

<211> 1466

<212> DNA

<213> Homo sapiens

<400> 6299

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<210> 6300

<211> 372

<212> PRT

<213> Homo sapiens

<400> 6300

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Ser	Gly	Gly	Pro	Arg	Arg	Ser	Arg	Gly	Gly	Gln	Pro	Ala	His	Trp	Pro
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Arg	Glu	Ser	Leu	Val	Leu	Tyr	His	Trp	Thr	Gln	Ser	Phe	Ser	Ser	Gln
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Lys	Val	Arg	Leu	Val	Ile	Ala	Glu	Lys	Gly	Leu	Val	Cys	Glu	Glu	Arg
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Asp	Val	Ser	Leu	Pro	Gln	Ser	Glu	His	Lys	Glu	Pro	Trp	Phe	Met	Arg
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Leu	Asn	Leu	Gly	Glu	Glu	Val	Pro	Val	Ile	Ile	His	Arg	Asp	Asn	Ile
		100						105					110		
Ile	Ser	Asp	Tyr	Asp	Gln	Ile	Ile	Asp	Tyr	Val	Glu	Arg	Thr	Phe	Thr
		115					120					125			
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		130					135					140			
Ala	Arg	Val	Leu	Gln	Tyr	Arg	Glu	Leu	Leu	Asp	Ala	Leu	Pro	Met	Asp
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			165						170					175	
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		180						185					190		
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	210					215					220				
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Gly Asp Ile His Thr Thr Leu Leu Ser Ala Val Ile Pro Asn Ala Phe				
	325		330	335
Arg Leu Val Lys Arg Lys Pro Pro Ser Phe Phe Gly Ala Ser Phe Leu				
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<210> 6301

<211> 911

<212> DNA

<213> Homo sapiens

<400> 6301

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<211> 202

<212> PRT

<213> Homo sapiens

<400> 6302

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Gly Ser Leu Thr Pro Pro Val Thr Pro Pro Ile Thr Pro Ser Ser Ser
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Phe Arg Ser Ser Thr Pro Thr Gly Ser Glu Tyr Asp Glu Glu Glu Val
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Asp Tyr Glu Glu Ser Asp Ser Asp Glu Ser Trp Thr Thr Glu Ser Ala
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Ile Ser Ser Glu Ala Ile Leu Ser Ser Met Cys Met Asn Gly Gly Glu
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Glu Lys Pro Phe Ala Cys Pro Val Pro Gly Cys Lys Lys Arg Tyr Lys
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Asn Val Asn Gly Ile Lys Tyr His Ala Lys Asn Gly His Arg Thr Gln
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Ile Arg Val Arg Lys Pro Phe Lys Cys Arg Cys Gly Lys Ser Tyr Lys
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Thr Ala Gln Gly Leu Arg His His Thr Ile Asn Phe His Pro Pro Val
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<400> 6303

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Leu Phe Val Leu Leu Pro Glu Gln Ser Pro Val Ser Tyr Ser Lys Arg
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Thr Ala Tyr Gln Lys Ala Gly Gly Asp Ser Gly Asn Val Asp Asp Asp
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Ile Leu Glu Glu Ser Thr Glu Lys Leu Lys Ser Leu Ser Leu Gln Gln
115 120 125
Gln Gln Asp Gly Asp Asn Gly Asp Ser Ser Lys Ser Thr Glu Thr Ser
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Asp Phe Glu Asn Ile Glu Ser Pro Leu Asn Glu Arg Asp Ser Ser Ala
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<211> 474

<212> PRT

<213> Homo sapiens

<400> 6306

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Tyr	Asp	Pro	Asp	Thr	Ser	Ile	Ile	Tyr	Leu	Cys	Gly	Lys	Gly	Asp	Ser

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 Lys Ser Asp Leu Phe Gln Asp Asp Leu Tyr Pro Asp Thr Ala Gly Pro
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 Pro Ile Leu Ile Ser Leu Lys His Gly Tyr Ile Pro Gly Lys Asn Arg
 385 390 395 400
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 Ala Ser Val Gln Asn Glu Ala Lys Leu Asp Glu Ile Leu Lys Glu Ile
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<211> 2119

<212> DNA

<213> Homo sapiens

<400> 6307

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<211> 483

<212> PRT

<213> Homo sapiens

<400> 6308

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<210> 6309

<211> 564

<212> DNA

<213> Homo sapiens

<400> 6309

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<212> PRT

<213> Homo sapiens

<400> 6310

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What is claimed is:

1. An isolated nucleic acid molecule encoding a polypeptide comprising an amino acid sequence that is at least 85% identical to a polypeptide including an amino acid sequence selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
2. The isolated nucleic acid molecule of claim 1, said molecule hybridizing under stringent conditions to a nucleic acid sequence complementary to a nucleic acid molecule comprising the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*, wherein *n* is any integer 1-3161, or the complement thereof.
3. The isolated nucleic acid molecule of claim 1, said molecule encoding a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161, or an amino acid sequence comprising one or more conservative substitutions in the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*.
4. The isolated nucleic acid molecule of claim 1, wherein said molecule encodes a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
5. The isolated nucleic acid molecule of claim 1, wherein said molecule comprises the sequence of nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
6. An oligonucleotide less than 100 nucleotides in length and comprising at least contiguous nucleotides selected from the group consisting of SEQ ID NO:2*n*-1, wherein *n* is any integer 1-3161, or the complement thereof.
7. A vector comprising the nucleic acid molecule of claim 1.

8. The vector of claim 7, wherein said vector is an expression vector.
9. A host cell comprising the isolated nucleic acid molecule of claim 1.
10. A substantially purified polypeptide comprising an amino acid sequence at least 80% identical to a polypeptide comprising the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
11. The polypeptide of claim 10, wherein said polypeptide comprises the amino acid sequence selected from the group consisting of SEQ ID NO: 2*n*, wherein *n* is any integer 1-3161.
12. An antibody that selectively binds to the polypeptide of claim 10.
13. A pharmaceutical composition comprising a therapeutically or prophylactically effective amount of a therapeutic selected from the group consisting of:
 - a) the nucleic acid of claim 1;
 - b) the polypeptide of claim 10; and
 - c) the antibody of claim 12;and a pharmaceutically acceptable carrier.
14. A kit comprising in one or more containers, a therapeutically or prophylactically effective amount of the pharmaceutical composition of claim 13.
15. A method of producing the polypeptide of claim 10, said method comprising culturing the host cell of claim 9 under conditions in which the nucleic acid molecule is expressed.
16. A method of detecting the presence of the polypeptide of claim 10 in a sample, comprising contacting the sample with a compound that selectively binds to said polypeptide under conditions allowing the formation of a complex between said polypeptide and said

compound, and detecting said complex, if present, thereby identifying said polypeptide in said sample.

17. A method of detecting the presence of a nucleic acid molecule of claim 1 in a sample, the method comprising contacting the sample with a nucleic acid probe or primer that selectively binds to the nucleic acid molecule and determining whether the nucleic acid probe or primer bound to the nucleic acid molecule of claim 1 is present in the sample.

18. A method for modulating the activity of the polypeptide of claim 10, the method comprising contacting a cell sample comprising the polypeptide of claim 10 with a compound that binds to said polypeptide in an amount sufficient to modulate the activity of the polypeptide.

19. The use of a therapeutic in the manufacture of a medicament for treating a syndrome associated with a ORFX-associated disorder, wherein said therapeutic is selected from the group consisting of:

- a) the nucleic acid of claim 1;
- b) the polypeptide of claim 10; and
- c) the antibody of claim 12.

20. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) contacting a test compound with the polypeptide of claim 10; and
- b) determining if said test compound binds to said polypeptide,

wherein binding of said test compound to said polypeptide indicates the test compound is a modulator of activity or of latency or predisposition to an ORFX-associated disorder.

21. A method for screening for a modulator of activity or of latency or predisposition to an ORFX-associated disorder, said method comprising:

- a) administering a test compound to a test subject at an increased risk ORFX-associated disorder, wherein said test subject recombinantly expresses a polypeptide encoded by the nucleotide of claim 1;

- b) measuring expression the activity of said protein in said test subject;
- c) measuring the activity of said protein in a control subject that recombinantly expresses said protein and is not at increased risk for an ORFX-associated disorder; and
- d) comparing expression of said protein in said test subject and said control subject, wherein a change in the activity of said protein in said test subject relative to said control subject indicates the test compound is a modulator or of latency of predisposition to an ORFX-associated disorder.

22. The method of claim 20, wherein said test animal is a recombinant test animal that expresses a test protein transgene or expresses said transgene under the control of a promoter at an increased level relative to a wild-type test animal, and wherein said promoter is not the native gene promoter of said transgene.

23. A method for determining the presence of or predisposition to a disease associated with altered levels of a polypeptide of claim 11 in a subject, the method comprising:

- a) measuring the amount of the polypeptide in a sample from said subject; and
- b) comparing the amount of said polypeptide in step (a) to the amount of the polypeptide present in a control sample,

wherein an alteration in the level of the polypeptide in step (a) as compared to the control sample indicates the presence of or predisposition to a disease in said subject.

24. The method of claim 23, wherein said subject is a human.

25. A method for determining the presence of or predisposition to a disease associated with altered levels the nucleic acid molecule of claim 1 in a subject, the method comprising:

- a) measuring the amount of the nucleic acid in a sample from the mammalian subject; and
- b) comparing the amount of said nucleic acid in step (a) to the amount of the nucleic acid present in a control sample,

wherein an alteration in the level of the nucleic acid in step (a) as compared to the control sample indicates the presence of or predisposition to said disease in said subject.

26. The method of claim 25, wherein said subject is a human.

27. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject polypeptide of claim 10 in an amount sufficient to alleviate or prevent said pathological condition.

28. The method of claim 27, wherein said subject is a human.

29. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject nucleic acid molecule of claim 1 in an amount sufficient to alleviate or prevent said pathological condition.

30. The method of claim 29, wherein said subject is a human.

31. A method of treating or preventing a pathological condition associated with an ORFX-associated disorder in a subject, the method comprising administering to said subject antibody of claim 12 in an amount sufficient to alleviate or prevent said pathological condition.

32. The method of claim 31, wherein said subject is a human.

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